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# Columbia University Bulletins of Information

## TEACHERS COLLEGE

### ANNOUNCEMENT

1901-1902

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UNIVERSITY OF ILLINOIS

Published by  
Columbia University  
in the City of New York  
Morningside Heights  
New York, N. Y.

## **Columbia University Bulletins of Information**

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(Issued 25 times during the Academic year, monthly in November and December, and weekly between February and June.)

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These include:

1. The President's Annual Report to the Trustees.
2. The Catalogue of the University, issued in December, price 25 cents.
3. The Announcements of the several Colleges and Schools and of certain Departments, issued in the Spring and relating to the work of the next year. These are made as accurate as possible, but the right is reserved to make changes in detail as circumstances require. The current number of any of these Announcements will be sent without charge upon application to the Secretary of the University.



Columbia University  
in the City of New York

# TEACHERS COLLEGE

## ANNOUNCEMENT

1901-1902

### ERRATA

The hours of English 4 have been changed to  
Tu. and Th. at 11.30 (first half-year only).

For requirement in English (page 91), see para-  
graphs 1 and 2, page 93.

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These include:

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Columbia University  
in the City of New York

# TEACHERS COLLEGE

## ANNOUNCEMENT

1901-1902



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# COLUMBIA UNIVERSITY

THE UNIVERSITY offers the following courses :

In COLUMBIA COLLEGE :

A four-year course leading to the degree of . . . . . A.B.

In BARNARD COLLEGE :

A four-year course for women leading to the degree of . . . . . A.B.

In the SCHOOL OF LAW :

A three-year course leading to the degree of . . . . . LL.B.

In the SCHOOL OF MEDICINE (College of Physicians and Surgeons) :

A four-year course leading to the degree of . . . . . M.D.

In the SCHOOL OF MINES :

A four-year course in Mining Engineering leading to the degree of . . . . . E.M.

“ “ Mining and Geology “ “ E.M.

“ “ Metallurgy “ “ Met.E.

In the SCHOOL OF CHEMISTRY :

A four-year course in Analytical Chemistry leading to the degree of . . . . . B.S.

“ “ Industrial Chemistry “ “ B.S.

“ “ Organic Chemistry “ “ B.S.

In the SCHOOL OF ENGINEERING :

A four-year course in Civil Engineering leading to the degree of . . . . . C.E.

“ “ Sanitary Engineering “ “ C.E.

“ “ Electrical Engineering “ “ E.E.

“ “ Mechanical Engineering “ “ Mech.E.

In the SCHOOL OF ARCHITECTURE :

A four-year course in Architecture leading to the degree of . . . . . B.S.

In TEACHERS COLLEGE :

A graduate course leading to the Higher Diploma.

“ “ “ Secondary Diploma.

Two-year courses leading to diplomas in Elementary Teaching, Kindergarten, Domestic Art, Domestic Science, Fine Arts, and Manual Training.

A two-year collegiate course which, if followed by a two-year professional course, leads to the degree of . . . . . B.S.

Certain subjects included in these courses are accepted in partial fulfilment of the requirements for the degrees of A.B., A.M. and Ph.D.

SUMMER SESSION :

Certain courses which are accepted in partial fulfilment of the requirements for the Teachers College diplomas and the various degrees.

Also many courses under the various faculties, especially the Faculties of Philosophy, Political Science, Pure Science, and Applied Science, leading to the university degrees of Master of Arts and Doctor of Philosophy. A combination of courses under the Faculties of Law and Political Science leads to the degree of Master of Laws.

The various courses comprising the first-year work in the School of Law, the School of Medicine, and the School of Architecture, and also those comprising the first and the second-year work in the School of Mines, the School of Chemistry, the School of Engineering, and Teachers College are open, as electives, to students in the College who have become such not later than the beginning of the Junior year. By a judicious arrangement of his work such a student, at the completion of his course for the degree of Bachelor of Arts, may secure admission to advanced standing in the various departments mentioned.

Information and circulars as to any of the above courses may be had by addressing the Secretary of the University. The annual circulars are issued in the Spring and are made as accurate as possible, but the right is reserved to change details of work offered, as circumstances require.

The catalogue of the University is published in December, and is sold at twenty-five cents a copy.

## TRUSTEES

SPENCER TRASK, *Chairman*

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FRANCIS O. MATTHIESSEN

ARCHER M. HUNTINGTON

## OFFICERS OF ADMINISTRATION

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JOHN F. WOODHULL, Ph.D., *Professor in Charge of Buildings and Grounds*

L. MASON BEEMAN, A.M., *Secretary*

LUCETTA DANIELL, *Directress*

ELIZABETH G. BALDWIN, *Librarian*

GEORGE S. KELLOGG, *Curator of the Educational Museum*

MARY C. BRUSH, *Registrar*

ISABELLE L. PRATT, *Secretary to the Dean*

## REPRESENTATIVES IN UNIVERSITY COUNCIL

JAMES EARL RUSSELL, Ph.D., *ex-officio*

JOHN FRANCIS WOODHULL, Ph.D. (*term expires 1902*)

## STANDING COMMITTEES OF THE FACULTY

Admission — Dean RUSSELL, *Chairman*, Professors BAKER, DODGE, McMURRY and RICHARDS

Higher Diploma—Professor McMURRY, *Chairman*, Professors WOODHULL and THORNDIKE and Dean RUSSELL

Secondary Diploma—Professor DODGE, *Chairman*, Professors MONROE and BIKLÉ, Mr. PRETTYMAN and Dean RUSSELL

Elementary and Kindergarten Diplomas and Collegiate Course—Professor BAKER, *Chairman*, Professors CASTLE, LLOYD, RUNYAN and Dean RUSSELL

Domestic Art, Domestic Science, Fine Arts and Manual Training Diplomas—Professor RICHARDS, *Chairman*, Professors CHURCHILL, KINNE, WOOLMAN and Dean RUSSELL

## FACULTY

SETH LOW, LL.D., *President*

JAMES EARL RUSSELL, *Dean*.....*History of Education*

A.B., Cornell University, 1887; Ph.D., Leipzig, 1894; teacher in secondary schools, 1887-90; principal of secondary school, 1890-93; student in the Universities of Jena and Leipzig, 1893-95; professor of philosophy and pedagogy in the University of Colorado, 1895-97; professor of the history of education, 1897-, and Dean, 1898-; European Commissioner of the Regents of the University of the State of New York, 1893-95; agent of the Bureau of Education, Washington, 1893; member of the American Psychological Association, and the National Council of Education: author of *German Higher Schools*

JOHN FRANCIS WOODHULL.....*Physical Science*

A.B., Yale College, 1880; Ph.D., Columbia University, 1899: teacher in secondary school, 1881-82; principal of secondary school, 1883-85; student in chemistry and physics, Johns Hopkins University, 1886; professor of natural science, New York State Normal School, 1887; professor of physical science, 1888-; fellow of the American Association for the Advancement of Science; author of *Text-Book on Physics and Laboratory Manuals in Physics and Chemistry*

NICHOLAS MURRAY BUTLER.....*Philosophy and Education*

A.B., Columbia University, 1882; A.M., 1883, and Ph.D., 1884; LL.D., Syracuse University, 1898; university fellow in philosophy, 1882-85; student at the Universities of Berlin and Paris, 1884-85; assistant in philosophy, Columbia College, 1885-86; tutor, 1886-89, and adjunct professor, 1889-90; professor of philosophy, ethics, and psychology, and lecturer on the history and institutes of education, 1890-95; professor of philosophy and education, 1895-; president of the New York College for the Training of Teachers (now Teachers College), 1886-91; member of the American Psychological Association, and the National Council of Education; editor of the *Educational Review*

JAMES MCKEEN CATTELL.....*Psychology*

A.B., Lafayette College, 1880, and A.M., 1883; Ph.D., Leipzig, 1886; student at Göttingen, Leipzig, Paris, and Geneva, 1880-82; fellow of Johns Hopkins University, 1882-83; student and assistant in the University of Leipzig, 1883-86; lecturer in the University of Cambridge, 1888; professor of psychology in the University of Pennsylvania, 1888-91; professor of experimental psychology, 1891-96; professor of psychology, 1896-; member of the American Psychological Association, the American Philosophical Society, the New York Academy of Sciences, the London Aristotelian Society, the London Neurological Society, the American Physiological Society, and the American Society of Naturalists; co-editor of the *Psychological Review*; responsible editor of *Science*

FRANKLIN THOMAS BAKER... *English Language and Literature*  
A.B., Dickinson College, 1885; A.M., 1889; A.M., Columbia University, 1900; teacher of Greek, mathematics, and English in secondary schools, 1885-92; student in Harvard University, 1892; instructor in English and mathematics, Horace Mann School, 1892-93; professor of English language and literature, 1893-

EDWARD HOWARD CASTLE..... *History*  
A.B., Denison University, 1888; A.M., Harvard University, 1894; teacher of mathematics, Greek, and history in secondary schools, 1888-93; instructor in history, Horace Mann School, 1894-96; associate professor of history, 1896-97; professor of history, 1897-

RICHARD ELWOOD DODGE..... *Geography*  
A.B., Harvard, 1890; A.M., 1894; assistant in geology, Harvard University, 1891-94; instructor in geology, Harvard University, 1894-95; instructor in geology and geography, 1895-96; associate professor of natural science, 1896-97; professor of geography, 1897-; fellow and recording secretary of New York Academy of Sciences; fellow Geological Society of America; fellow American Geographical Society; member Boston Society of Natural History, and the Geological Society of Washington, D. C.; editor of *The Journal of School Geography*; associate editor of the *Bulletin of the American Geographical Society*; author, *Reader in Physical Geography for Beginners*

HELEN KINNE..... *Domestic Science*  
Diploma, Teachers College, 1890; teacher in private classes, 1886-88; instructor in domestic science, 1891-97; professor of domestic science and director of the department, 1897-

MARY DUNCAN RUNYAN..... *Kindergarten*  
Diploma, St. Louis Kindergarten Training School, 1880; graduate student, 1880-84; instructor in St. Louis Public Kindergartens, 1880-84; instructor in kindergarten and elementary grades, 1884-94; principal of the kindergarten and instructor in normal classes, Pratt Institute, 1894-95; instructor in Isabel Crow Kindergarten Association, 1895-96; instructor in kindergarten, 1896-97; professor of kindergarten and director of the department, 1897-

ALFRED VANCE CHURCHILL..... *Fine Arts*  
Student in Oberlin College, 1881-87; A.M., Oberlin College, 1898; student in the Königliche Hochschule, Berlin, the University of Leipzig, and the Académie Julien, Paris, 1887-90; director of the art department, Iowa College, 1891-93; instructor in St. Louis secondary and normal schools, 1893-97; professor of fine arts and director of the department, 1897-

FRANK MORTON McMURRY.... *Theory and Practice of Teaching*  
Ph.D., Jena, Germany, 1889; student at University of Michigan, 1881-82; principal of schools in Illinois, 1883-86; student at Universities of Halle

and Jena, 1886-89; principal of grammar school, Chicago, 1889-90; professor of pedagogics and training teacher in State Normal School, Normal, Ill., 1891-92; student at Geneva and Paris, 1892-93; professor of pedagogy in the University of Illinois, 1893-94; principal of Franklin School, Buffalo, 1894-95; dean and professor of pedagogics in Teachers College, University of Buffalo, 1895-98; professor of theory and practice of teaching, 1898-

CHARLES RUSSELL RICHARDS..... *Manual Training*

S.B., Massachusetts Institute of Technology, 1885; assistant superintendent of Whittier Machine Company, 1885-87; teacher of manual training, Industrial Education Association, 1887-88; professor of manual training and director of department of science and technology, Pratt Institute, 1888-98; professor of manual training and director of the department, 1898-

SAMUEL TRAIN DUTTON..... *School Administration*

A.B., Yale University, 1873; A.M., Yale, 1900; principal of high school, South Norwalk, Connecticut, 1873-78; principal of Eaton Grammar School, New Haven, 1878-82; superintendent of schools, New Haven, 1882-90; superintendent of schools, Brookline, 1890-1900; lecturer on school supervision, Harvard University, 1896-98; professor of school administration and superintendent of Teachers College schools, 1900-

GONZALEZ LODGE..... *Latin and Greek*

A.B., Johns Hopkins University, 1883; graduate scholar and fellow, 1883-86; Ph.D., 1886; professor of Greek, Davidson College, North Carolina, 1886-88; American School, Athens, and University of Bonn, 1888-89; associate in Latin, Bryn Mawr College, 1889-94; associate professor, 1894-95; professor, 1895-1900; professor of Latin and Greek, Teachers College, 1900-; editor of *Gorgias of Plato*; associate author *Gildersleeve-Lodge Grammar*, *Gildersleeve-Lodge Latin Composition*; managing editor *Gildersleeve-Lodge Latin Series*

FRANCIS ERNEST LLOYD..... *Biological Science*

A.B., Princeton University, 1891; A.M., 1895; assistant in biology, Williams College, 1891-92; professor of biology and geology, Pacific University, Oregon, 1892-95; professor of biology, Pacific University, Oregon, 1895-97; adjunct professor of biological science, 1897-; botanist, Lumholz expedition to Mexico, 1892; botanist, Columbia College expedition to Puget Sound, 1896; associate editor *Bulletin of the Torrey Botanical Club*

CHARLES EARL BIKLÉ..... *Mathematics*

A.B., Dickinson College, 1886; A.M., 1889; teacher in secondary schools, 1886-90; instructor in mathematics, Dickinson College Preparatory School, 1890-92; instructor in mathematics, Forsythe School, 1892-93; instructor in mathematics, Horace Mann School, 1893-97; adjunct professor of mathematics, 1897-

MARY SCHENCK WOOLMAN..... *Domestic Art*

Graduate of Mary Anna Longstreth School, Philadelphia, Pa., 1878; diploma, Teachers College, 1895; instructor in domestic art, 1895-97; adjunct professor and director of domestic art, 1897-

PAUL MONROE..... *History of Education*

B.S., Franklin College, 1890; M.S., 1895; Ph.D., University of Chicago, 1897; principal secondary schools, 1890-94; fellow in sociology, University of Chicago, 1895-97; instructor in history, 1897-99; adjunct professor of the history of education, 1899-

EDWARD LEE THORNDIKE..... *Genetic Psychology*

A.B., Wesleyan University, 1895; A.B., Harvard University, 1896; A.M., 1897; Ph.D., Columbia University, 1898; instructor in education and teaching, Western Reserve University, College for Women, 1898-99; instructor in genetic psychology, 1899-1901; adjunct professor, 1901-; member of the American Psychological Association, the American Association for the Advancement of Science, and the New York Academy of Sciences; assistant editor of the *Popular Science Monthly*

## CHARLES HUBERT FARNSWORTH

Musical student, Boston and Worcester, 1876-88; organist and teacher of piano, organ and harmony, Worcester; instructor in music, Colorado State University and Preparatory School, 1889-90; student of school music in England, 1894; supervisor of music, public schools, conductor of choral society and orchestra, Boulder, Colorado, 1891-1900; instructor in music, Teachers College, 1900-1901; adjunct professor, 1901-

## VIRGIL PRETTYMAN

A.B., Dickinson College, 1892; A.M., 1895; instructor in Latin and Greek in Dickinson College Preparatory School, 1892-94; instructor in Latin and Greek in Horace Mann School, 1894-95; principal, 1895-

## FREDERICK REMSEN HUTTON

A.B., Columbia University, 1873; A.M., 1876; C.E. and M.E., School of Mines, 1876; Ph.D., Columbia University, 1882; assistant in civil and mining engineering, School of Mines, 1876-77; instructor in mechanical engineering, 1877-81; adjunct professor, mechanical engineering, 1881-91; professor in mechanical engineering, 1891-; author *Machine Tools and Wood-working Machinery*, U. S. Census Report, 1882; *Mechanical Engineering of Power Plants*; associate editor *Mechanics*; department editor *Johnson's Encyclopedia*

## OTHER OFFICERS OF INSTRUCTION

WILLIAM SMITH ROBINSON..... *Drawing and Painting*  
Graduate of Massachusetts Normal Art School, 1884; instructor, Maryland Institute, School of Art and Design, 1885-89; student in Académie Julien, Paris, 1889-90; instructor in water-color painting, Drexel Institute, 1891-93; instructor, Pennsylvania Academy of Fine Arts, 1892-99; instructor in freehand drawing and painting, 1894-

GEORGE PHILIP KRAPPE..... *English*  
A.B., Wittenberg College, 1894; A.M., 1897; Ph.D., Johns Hopkins University, 1899; scholar in Johns Hopkins University, 1895-96; instructor in English, Horace Mann School, 1897-98; instructor in English, 1897-

CHARLES PRENTICE BENNS..... *Machine-work*  
M.E., Stevens Institute of Technology, 1889; draftsman, Garvin Machine Company, N. Y., 1890; foreman of Machine Shop of Builders' Iron Foundry, Providence, R. I., 1891; foreman, Browne & Sharpe Manufacturing Company, Providence, R. I., 1892-93; teacher of applied mechanics and machine-shop work, Manual Training High School, Providence, R. I., 1892-97; instructor in machine-work, 1897-

ELIJAH WILLIAM BAGSTER-COLLINS..... *German*  
A.B., Brown University, 1897; A.M., Columbia University, 1898; student in Berlin, 1891-93; instructor in German, Brown University, Extension Department, 1895-96; student in University of Marburg, summer session, 1898; instructor in German, 1897-

OSWALD RUDOLF EKLÖF..... *Wood-working*  
Graduate of Institute of Pedagogy and Sloyd, Stockholm, 1890; student of Nääs, Sweden, 1891; student in the Sloyd Training School, Boston, Mass., and teacher of sloyd, State Reformatory, Concord, Mass., 1892-95; teacher of sloyd in public schools, Westbrook, Maine, 1895-98; instructor in wood-working, 1898-

LOUIS ROUILLION..... *Mechanical Drawing*  
B.S., Cornell University, 1891; A.M., Columbia University, 1900; teacher in secondary schools, 1890-93; instructor in mechanical drawing, Pratt Institute, 1893-98; instructor in mechanical drawing, 1898-; author of *Course in Mechanical Drawing*

CHARLES CONRAD SLEFFEL..... *Forging*  
Foreman, Gill Car Manufacturing Company, Columbus, Ohio, 1880-83; chief steel-worker, Case Manufacturing Company, Columbus, Ohio, 1883-87; foreman, Columbus Buggy Company, Columbus, Ohio, 1887-96; forge master, Ohio State University, 1896-98; instructor in forging, 1898-

CHARLES WILLIAM WEICK..... *Wood-working*  
B.S., Ohio State University, 1898; student, Cornell University, summer, 1898; foreman in pattern-shop, Buffalo Forge Company, Buffalo, New York, 1881-88; Johnson Steel Company, Johnstown, Pennsylvania, 1888-90; draftsman, Buffalo Forge Company, 1890-92; chief draftsman and designer, Homer Machine Company, Holyoke, Massachusetts, 1892-93; instructor in carpentry, pattern-making and founding, Ohio State University, 1893-99; instructor in wood-working, 1899-

MAURICE ALPHEUS BIGELOW..... *Biological Science*  
B.S., Ohio Wesleyan University, 1894; M.S., Northwestern University, 1896; instructor in biology, Ohio Wesleyan University, 1894-95; fellow and assistant in zoölogy, Northwestern University, 1895-96; instructor in zoölogy, College of Liberal Arts and Academy, Northwestern University, 1896-98; assistant in zoölogy, Radcliffe College, 1898-99; instructor in biological science, 1899-

ARTHUR CHARLES HOWLAND..... *History*  
A.B., Cornell University, 1893; Ph.D., University of Pennsylvania, 1897; teacher in secondary school, 1893-94; traveling fellow of Cornell University, 1894-95; student at Göttingen and Leipzig, 1894-95; fellow of the University of Pennsylvania, 1896-97; instructor in European history, University of Illinois, 1897-98; senior fellow of the University of Pennsylvania, 1898-99; instructor in history, 1899-

CHARLES FREDERICK VON SALTZA. . . *Drawing and Clay Modeling*  
Student in the schools of the Royal Academy, Stockholm, and pupil of the Academy in Brussels and of Leon Bonnat, Paris, 1876-83; instructor in drawing and painting in the St. Louis School of Fine Arts, 1892-98; instructor in painting in the Chicago Art Institute, 1898-99; instructor in drawing and modeling, 1899-

CAROLINE GERALDINE O'GRADY..... *Kindergarten*  
Diplomas, Toronto Normal School, 1892 and 93; student and assistant in Toronto Normal School, 1893; instructor in Montreal Girls' High School, 1894-95; assistant director of kindergarten training class, Philadelphia Normal School, 1895-97; principal, 1897-99; teaching fellow in kindergarten, 1899-1900; instructor, 1900-

ELIZABETH CARSS

Ph.B., Cornell University, 1895; Teachers College diploma, 1897; assistant in science, Teachers College, 1895-97; instructor in biology and geography, Horace Mann School, 1897-98; instructor in biology, Horace Mann School, 1898-1900; supervisor of nature study, Horace Mann School, 1900-

**MARY L. D. FORREST**

Teachers College diploma, 1899; instructor in domestic science, 1899-

**FRANK ELBERT BROOKS.....***French*

A.B., Cornell University, 1890; Bonn and Essen, Germany, 1890-91; Bonn University, Geneva and Paris, 1896-99; instructor in Norwich High School, 1881-82; South New Berlin High School, 1885-86; head of Department of Modern Languages, St. Paul's School, 1893-95; instructor in French, 1900-

## HORACE MANN SCHOOL

### Officers of Administration \*

JAMES E. RUSSELL, Ph.D., *Dean*

SAMUEL TRAIN DUTTON, A.M. .... *Superintendent*  
VIRGIL PRETTYMAN, A.M. .... *Principal of High School*  
JULIA HELEN WOHLFARTH. .... *Principal of Elementary School*  
MARY DUNCAN RUNYAN. .... *Principal of Kindergarten*

### Teachers

EUGENIE MENUT. .... *French*  
University of France, 1872

MARY ROGERS. .... *Wood-carving*  
Teachers College, 1892-94; Metropolitan Art School, 1892-94; Pratt  
Institute, 1896-97

ELLEN YALE STEVENS. .... *English*  
Diploma, Teachers College, 1893; Ph.B., Chicago University, 1900

MAY BELLE VAN ARSDALE. .... *Physics and Chemistry*  
Diploma, Teachers College, 1893

KATHERINE MORE COCHRAN. .... *Greek and Latin*  
A.B., Vassar College, 1890; Columbia University, 1894-95, 1897-98

ELIZABETH CARSS. .... *Biology*  
Ph.B., Cornell University, 1895; Diploma, Teachers College, 1897

CHARLES MCCOY BAKER. .... *Latin*  
A.B., Dickinson College, 1893; Teachers College, 1894-95

ELIJAH WILLIAM BAGSTER-COLLINS. .... *German*  
A.M., Columbia University, 1898; Berlin University, 1891-93; Marburg,  
1898

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\* Heads of departments in Teachers College are supervisors of their respective subjects in the Horace Mann School, and all teachers in the School assist either in the conduct of College classes or in the direction of observation and practice in teaching.

CHARLES PRENTICE BENNS.....	<i>Machine-work</i>
M.E., Stevens Institute of Technology, 1889	
HERBERT VAUGHAN ABBOTT.....	<i>English</i>
A.B., Amherst College, 1885; Harvard University, 1894-96	
FRANK ELBERT BROOKS.....	<i>French</i>
A.B., Cornell University, 1890; Bonn and Essen, Germany, 1890-91, Bonn University, Geneva and Paris, 1896-99	
MARY DAVIS CHAMBERS.....	<i>Drawing</i>
Washington University, 1885-87; St. Louis Art Museum, 1882-87; 1890-91	
OSWALD RUDOLF EKLÖF.....	<i>Wood-working</i>
Stockholm Institute of Sloyd, 1890; Nääs, 1891	
LOUIS ROUILLION.....	<i>Mechanical Drawing</i>
B.S., Cornell University, 1891; A.M., Columbia University, 1900	
CHARLES CONRAD SLEFFEL.....	<i>Forging</i>
Forge master, Ohio State University, 1896-98	
MAURICE ALPHEUS BIGELOW.....	<i>Biological Science</i>
M.S., Northwestern University, 1896	
ELIZA RHEES BUTLER.....	<i>History</i>
Diploma, Teachers College, 1897	
ARTHUR CHARLES HOWLAND.....	<i>History</i>
Ph.D., University of Pennsylvania, 1897	
CHARLES WEICK.....	<i>Wood-working and Pattern-making</i>
B.S., Ohio State University, 1898	
CLARA BARBARA KIRCHWEY.....	<i>Geography</i>
Diploma, Albany Training School, 1887; Teachers College, 1900	
ROLAND HUGH WILLIAMS.....	<i>Mathematics</i>
B.S., Wesleyan University, 1898	
IDA ELIZABETH ROBBINS.....	<i>Fourth Grade</i>
Diploma, Oswego Normal School, 1888	
MARY BROWNSON GILLMORE.....	<i>Eighth Grade</i>
Diploma, Teachers College, 1891; Ph.B., Cornell University, 1899	
EVELYN BATCHELDER.....	<i>Second Grade</i>
Chelsea Training School, 1891	
SUSAN ADELE LATHROP.....	<i>Sixth Grade</i>
Diploma, Teachers College, 1893; Teachers College, Buffalo, 1896-97	

MILDRED IONE BATCHELDER.....	<i>Third Grade</i>
Diploma, Springfield Training School, 1889	
CAROLINE WOODBRIDGE HOTCHKISS.....	<i>Seventh Grade</i>
Radcliffe College, 1895-96; Principal of Froebel Academy, 1889-95	
WINONA MARION PRATT.....	<i>Fifth Grade</i>
Diploma, Bridgeport Training School, 1895; Potsdam Normal School, 1896-97	
MARY EDWARDS CALHOUN.....	<i>Seventh Grade</i>
Diploma, Teachers College, 1898	
MARIAM CHARLOTTE WINCHESTER.....	<i>First Grade</i>
Critic teacher, St. Paul Training School, 1894-97, and in Winona Normal School, 1897-98	
MARY FREDERIKA KIRCHWEY.....	<i>Sixth Grade</i>
Diploma, Albany Training School, 1884	
ANNA BARTOW LATHROP.....	<i>Eighth Grade</i>
B.L., Smith College, 1890; Teachers College, Buffalo, 1896-97	
MARY HAMMETT LEWIS.....	<i>Third Grade</i>
Nebraska State University, 1890-93	
EDITH CORNELIA BARNUM.....	<i>Second Grade</i>
Kindergarten Training Class, 1891-92; diploma, Teachers College, 1899	
LOUISE CHRISTINE SUTHERLAND.....	<i>Kindergarten</i>
Diploma, Teachers College, 1894	
ISABEL COBB FRENCH.....	<i>Kindergarten</i>
Diploma, Boston Normal School, 1894	
ANNE SEYMOUR BLAKE.....	<i>Kindergarten</i>
Diploma, Pratt Institute, 1896	
KATE STUART ANTHONY.....	<i>Domestic Art</i>
Pratt Institute, 1896-97	
FRANCES ELBERTINE MCRAE.....	<i>Physical Science</i>
Diploma, Teachers College, 1899	
ALETTA VAN WYCK SCHENCK.....	<i>Domestic Art</i>
MATILDA GARRETSON REA.....	<i>Domestic Art</i>
LAURA BRAINARD WHITTEMORE.....	<i>Domestic Science</i>
Diploma, Teachers College, 1889	
LUCY HESS WEISER.....	<i>Manual Training</i>
Diploma, Teachers College, 1895	

## EXPERIMENTAL SCHOOL

SAMUEL TRAIN DUTTON, A.M. .... *Superintendent*  
FRANK MORTON McMURRY, Ph.D. .... *Supervisor*  
EDWARD LEE THORNDIKE, Ph.D. .... *Supervisor*  
AMY SCHÜSSLER. .... *Critic Teacher in charge of Primary Grades*  
ANNE SEYMOUR BLAKE, *Critic Teacher in charge of Kindergarten*

# TEACHERS COLLEGE

## GENERAL STATEMENT

Teachers College, founded in 1888 and chartered by the Regents of the University of the State of New York on January 12, 1889, became, by an agreement dated March 22, 1898, a part of the educational system of Columbia University. The President of Columbia University is President, *ex-officio*, of Teachers College, and the College is represented upon the University Council by the Dean and an elected representative of its Faculty. The College maintains its separate corporate organization, and its Board of Trustees continues to assume the entire financial responsibility for its maintenance.

Teachers College is the professional school of Columbia University for the study of education and the training of teachers. It takes academic rank with the Schools of Law, Medicine and Applied Science. The purpose of Teachers College is to afford opportunity, both theoretical and practical, for the training of teachers of both sexes for kindergartens and elementary and secondary schools, of principals, supervisors and superintendents of schools, and of specialists in various branches of school work, including normal schools and colleges. The diplomas of the College are granted to those who satisfactorily complete the several courses offered and certificates of work actually performed are granted to students who have pursued partial courses.

The educational administration of Teachers College is by departments, each of which has its own director and a full corps of instructors. The departments are as follows: Education, English, French and German, Greek and Latin, History, Biology, Geography and Geology, Physics and Chemistry, Mathematics, Kindergarten, Fine Arts, Domestic Art, Domestic Science, Manual Training, Music and Voice Training, and Physical Training. No department undertakes work for which adequate provision has been made in other faculties of the University. In history, the languages, natural sciences

and mathematics, therefore, few collegiate courses are offered in Teachers College; and in systematic and experimental psychology, philosophy, ethics, anthropology, economics and social science the resources of the University are amply sufficient for all needs.

The College maintains two schools of observation and practice: one, the Horace Mann School, the other known as the Experimental School. The Horace Mann School comprises three departments—a kindergarten for children of three to six years of age, an elementary school of eight grades, and a high school of four grades. The Experimental School consists of a kindergarten, elementary school and special classes in sewing, cooking and manual training. Each department of the Horace Mann School is in charge of a principal, who ranks with directors of departments in the College. The Experimental School is under the immediate supervision of the College Professor of the Theory and Practice of Teaching. Both schools are under the general direction of a Superintendent of Schools, who is also the College Professor of School Administration. The Horace Mann School is a pay school for children of both sexes who intend to secure a complete secondary education; the Experimental School, likewise for both sexes, gives free tuition to children of the neighborhood who cannot continue their studies beyond the elementary grades. Thus both schools form a great working laboratory in all lines of professional study and research.

## ADMISSION

### General Regulations

**1** All persons desiring to enter Teachers College are required to fill out a blank form of application and file the same with the Dean. This application blank will be sent to any address on application to the Secretary.

**2** Each candidate must bring from the principal of the school last attended by him, or from some other person equally qualified to give it, a recommendation for admission certifying to the moral character of the applicant, and his qualifications for undertaking professional work.

3 No candidate can be admitted who is not in good physical condition. A physician's certificate to this effect, presented upon application for admission, or an examination by the college physician, or both, are required.

4 Examinations for admission to the Collegiate course will begin on the Monday following the second Wednesday in June and on the last Monday in September. In 1901, they will begin on June 17 and September 30, respectively; in 1902, on June 16 and September 29. Examination at other times will be granted at the discretion of the Committee on Admission, but in every such instance a special fee of \$5 must be paid in advance.

5 Students who complete the Collegiate course, or who present satisfactory credentials from approved institutions of learning, are admitted without examination to other courses in Teachers College. But in case of apparent deficiency the Committee on Admission is authorized to impose suitable examinations or other tests.

6 Students admitted to any class are held on probation until the end of the first half-year. Any student who fails to pass in at least one-half of his work during this period of probation will be dropped from the roll of the College.

7 Except with the approval of the Dean and the Committee on Admission no student will be admitted to the class next above the one he first enters until all his entrance conditions have been removed.

8 Candidates for admission to advanced standing must make application in writing to the Dean. Each application will be considered on its own merits. Such tests will be imposed in each case as will best demonstrate the applicant's ability to undertake the work proposed. Students from colleges and professional schools that maintain courses the equivalent of those in Teachers College may receive credit on admission to Teachers College for such courses as have been satisfactorily completed.

9 Students in good standing in any department of Columbia University may be admitted to Teachers College upon the presentation of a certificate, signed by the Dean of the Faculty in which they are primarily registered, stating that they have

permission to undertake certain designated courses of professional study.

**10** All students are required to present themselves for registration on the Friday or Saturday of the week preceding the first Monday of October in each year. Enrolment at a later date is permitted only to those who obtain the consent of the Dean, good cause for the delay having been shown. The presence of all students is required on the day immediately following the close of all vacations and recesses.

**11** All fees for the first half-year must be paid to the Cashier of Teachers College on or before the last Saturday in October, and all fees for the second half-year on or before the third Saturday in February.

**12** At the time of registration, each student must file with the Registrar a list of studies for the year approved by the standing committee of the faculty. No change will be permitted in such registered lists, except with the written consent of the committee, and no credit will be allowed for any course not approved and registered in this manner.

**13** Special students and auditors must present in writing at the time of registration a statement from each instructor whose classes they desire to enter, showing that they are qualified to undertake such studies, and that they have permission so to do.

#### FEES AND EXPENSES

The regulations in regard to fees are as follows:

*For matriculation (paid but once)..... \$ 5 00*

*For tuition (per annum):*

For candidates for the higher diploma or secondary diploma..... \$150 00

For candidates for other diplomas..... 100 00

For students in the collegiate course and special students..... 100 00

For auditors and irregular students for each hour of instruction per week for the year..... 15 00

Students who pay less than \$150 per annum in fees will be required to pay an additional fee of \$5 for each hour of instruction per week for the year for all courses taken in other departments of the University.

Students who take laboratory courses will be required to pay a special fee for supplies and materials.

*For graduation:*

For any diploma.....	\$ 5 00
For the bachelor's degree.....	15 00
For the degree of master of arts.....	25 00
For the degree of doctor of philosophy.....	35 00

*For use of gymnasium:*

Teachers College gymnasium for women.....	\$ 2 00
Columbia University gymnasium for men.....	7 00

This fee entitles the student to a physical examination, a locker and the free use of the gymnasium and the baths, including all necessary laundry service. It is required only of students in the collegiate course; for others the use of the gymnasium is optional. Irregular students who elect Physical Training 1, 2 or 3 pay an annual tuition fee of \$15.

For the convenience of students tuition fees are payable in two equal installments, namely, on or before the last Saturday in October and on or before the third Saturday in February.

### STUDENTS' EXPENSES

#### Comparative Statement Based on Students' Estimates for the Academic Year

	Low	Average	Liberal
Matriculation fee (paid but once)	\$ 5 100-150	\$ 5 100-150	\$ 5 100-150
Tuition fee	2-7	2-7	2-7
Gymnasium fee	15	20	30 up
Books and stationery	20	30	40 up
Incidentals	52	115	160 up
Room (35 weeks)	112	160	192 up
Board (32 weeks)	16	24	32 up
Total	\$322-377	\$456-511	\$561-616 up

Many students effect a material reduction in the cost of living by the formation of boarding clubs. Unfurnished apartments of 5-7 rooms may be rented from \$25 a month upwards, and apartments of 3 or 4 rooms from \$19 a month up. Apartments furnished for housekeeping are available at proportionately higher rates.

Lists of boarding places are on file in the office of the Directress, who is prepared to give advice as to desirable flats

or rooms. Furniture can be rented or purchased at favorable rates for housekeeping purposes, and the older students are encouraged to form themselves into groups and reduce their expenses in this way. All women students under twenty-five years of age must have the approval of the Directress as to their arrangements for living.

#### NEW DORMITORY BUILDING

The Morningside Realty Company is now erecting a handsome fire-proof Dormitory adjoining Teachers College at a cost of about \$1,000,000. This building when ready for occupancy in the Fall of 1901 will be one of the most complete college dormitories in this country, and will afford a good home under proper supervision for all women students of the University. Every room will be outside and entirely light. There will be a complete elevator system, laundry, baths, ample storage rooms, bicycle rooms, steam heat, hot water, and both public and private parlors and reception rooms. Besides the Dormitory proper there will be two end wings devoted to apartments of 7 and 8 rooms and bath which will be rented unfurnished to families. The main dining halls and restaurant will be on the top floor, but a quick-lunch will also be served on the first floor.

The plan is so flexible that rooms may be rented singly or in suites of 2 to 16 rooms. The single rooms in the dormitories will rent unfurnished from \$2 to \$4 per week, and suites with 2 rooms and bath from \$10 to \$15 per week. The apartments of 7 or 8 rooms and bath will rent unfurnished from \$1,200 to \$1,500 per year. Board will be \$4 to \$4.50 per week. Students of the University will be entitled to a discount from the regular prices for rooms, and professors and instructors connected with Columbia University will have a reduction from the prices fixed for the apartments. Apartments will be especially attractive for small families whose children are attending the High School and the various departments of the University.

A descriptive circular fully illustrated will be sent to any address on application to the Secretary.

## COURSES OF INSTRUCTION

### EDUCATION

The Department of Education properly includes all courses of instruction under the Faculty of Teachers College, but for convenience of designation the term Education is applied specifically only to courses in the history and philosophy of education, educational administration, child study, and the theory and practice of teaching. Psychology **A** and Education **1, 2** and **3** are general introductory courses, and as such they, or their equivalents, are prerequisite to all other courses in Education. For pages on which the courses required for the different diplomas and for the regulations governing the award of the degrees of B.S., A.B., A.M. and Ph.D. are indicated, see *Table of Contents*. The courses which may be counted by a candidate for the Higher Diploma or the Ph.D. degree, in partial fulfillment of the minimum requirements for a major subject, are the following: Education **5, 6, 7, 8, 12, 13, 16, 17, 18, 19, 21, 23, 25, 28, 32**. Candidates for the Secondary Diploma or for the A.M. degree may also count Education **1, 2** and **4** in partial fulfillment of the requirements for a major subject. Candidates who present Education as a major subject for the Higher Diploma or the Ph.D. degree are also required to take without credit one seminar or practicum as follows: Education **29, 30, 31, 33**, Philosophy **12**, Psychology **15**. The courses offered especially for undergraduate students are Education **1, 2, 3, 4, 9, 10, 11, 14, 20, 22, 24, 26, 34, 35, 36, 37, 38, 39, 40, 41, 42** and **43**. These courses are open to all qualified students who are candidates for a diploma or for a B.S. or A.B. degree, and to special students and auditors who obtain the consent of the instructor concerned.

**1** History of education. Lectures, required reading, reports and discussions. 3 points.\* Professor MONROE

Tu. and Th. at 3.30, and a third hour in sections—(a) F. at

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\* In this Announcement the credit given for courses is scheduled in *points*. One point represents one hour of class work per week throughout the year. Two hours of practical work, as in the shop, laboratory or schoolroom, count as one hour of class work.

9.30 for candidates for secondary diploma and graduate students; (b) F. at 3.30 for students in departmental courses; (c) S. at 9.30 for students in elementary and kindergarten courses, and (d) S. at 11.30 for such students only as may be designated by the instructor. Graduates may omit the third hour and receive credit for 2 points.

The course involves a study of ideals controlling various peoples, the expression of these ideals in their conception of education, and the attempt at realization through their educational systems. 1. Evolution of early education—(a) in genetic society; (b) in political societies. 2. Oriental education—China as a type. 3. Greek education—(a) historic systems; (b) theorists. 4. Purposes and methods of Roman education. 5. The Interaction of Greek, Roman and Christian influences in forming the educational ideals and shaping the school systems of mediæval times. 6. The Middle Ages—(a) the Carolingian revival; (b) scholasticism; (c) the rise of universities. 7. The Renaissance. 8. The Reformation and education. 9. The development of modern educational theory—(a) the humanistic conception; (b) the religious conception; (c) the realistic conception; (d) the early scientific conceptions; (e) the psychological conception; (f) the sociological conception. 10. Development of the modern school system. 11. Development of the modern curriculum. 12. Development of method. Throughout the course the types of education are to be studied as phases of the history of civilization. The course will include a brief discussion of the scope of the subject. A printed syllabus is issued for this course.

Open to juniors, seniors and graduates.\* Required for all diplomas.

**2** Principles of education. Lectures, essays and required reading. 2 points. Professor BUTLER, assisted by Mr. UPDEGRAFF

M. and W. at 3.30. Room 305, Schermerhorn Hall.

This course aims to lay the basis for a scientific theory of education considered as a human institution. The process of education is explained from the standpoint of the doctrine of evolution, and the fundamental principles thus arrived at are applied from the threefold standpoint of the history of civilization, the developing powers of the child, and the cultivation of individual and social efficiency. During a portion of the course, Butler's *Meaning of Education*, Harris's *Psychologic Foundation of Education*, Davidson's *Aristotle*

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\* The term "freshman" as used in this Announcement designates a student in the first year of the collegiate course; "sophomore," the second year of the collegiate course; "junior," the first year of a professional course; "senior," the second year of a professional course; "graduate," a student who is a candidate for the higher diploma, the diploma in secondary teaching, or a higher degree.

and the *Ancient Educational Ideals*, and Eliot's *Educational Reform* are constantly referred to. A printed syllabus is issued for this course.

Open to seniors and graduates.

Required for the diplomas in secondary, elementary and kindergarten teaching. Prerequisite: Psychology A.

2 (b) Principles of education. Recitations and discussions.

MR. UPDEGRAFF (under direction of Professor BUTLER)

F. at 3.30. Room 407, Schermerhorn Hall.

This course is supplementary to Education 2, and is designed to give students of the Principles of Education an opportunity to pursue farther, by the method of recitation and discussion, the study of the several topics developed in Education 2 by lecture and required reading.

Open to students who take or have taken Education 2. Required of undergraduates who are candidates for the diploma in elementary or kindergarten teaching.

3 Applications of psychology in teaching. 1½ points.

Professor THORNDIKE

Three sections (second half-year only). M., W. and F.

(a) 9.30—open to candidates for diplomas in elementary and kindergarten teaching.

(b) 11.30—open to candidates for diplomas in domestic art, domestic science, manual training, music and fine arts.

(c) 3.30—open to collegiate students and to others, by permission of the instructor.

This course will present the general principles that control successful teaching so far as such can be derived from psychological laws and from the study of school practice. It will aim to prepare students for general class-room work and for the courses in the methods of teaching the separate subjects. The work in division (b) will be specialized to meet the needs of the class.

Open to sophomores and juniors.

Required for all diplomas. Prerequisite: Psychology A.

4 General method and practice teaching. Weekly conferences following observation of lessons and practical work in the schoolroom. 2, 3 or 4 points. Professor McMURRY

S., 10.30-12.30, and W., 11.30 for observation (2 points), and 60 to 120 hours' practical work (1 to 2 points).

The special aim of this course is the formulation of a scientific method of the recitation and the application of the principles of method to the subjects commonly taught in primary and grammar schools. Lessons will be observed in some subject during the week, and discussed in a systematic way at the Satur-

day conference. The practical conduct of a class or grade will be studied in the same manner. Students who elect practice teaching must make definite arrangements with the instructors in advance, both as to hours and nature of the work.

Open to seniors and graduates. Required for the diploma in elementary teaching. Prerequisite: Psychology **A** and Education **3**.

**5** Supervision and critic teaching. Study of practical school work, followed by reports and discussions. 3 or 4 points. Professor McMURRY

M., W. and F. at 3.30; observation hour, Tu. at 9.30 (3 points), and 60 hours' practical work (1 point).

This course is a continuation of Education **3** and **4**, and is intended only for those who are preparing to become superintendents, principals or supervisors of public schools, and for principals and critic teachers of normal schools. It includes an intensive study of a few important educational principles, and the application of those principles in class instruction and the conduct of schools. Students will observe lessons given by regular teachers and by students in training; they will be instructed in the duties of supervisors, and have opportunity to direct practice-teaching, to give criticism, to conduct discussions and meetings of parents and teachers, and generally to perform the duties of school supervisors. Students who elect to do the practical work must make definite arrangements with the instructors in advance.

Open to graduates only. Prerequisite: Education **4**, or its equivalent.

**6** School administration. Lectures, essays and discussions. 2 points. Professor DUTTON

Tu. and Th. at 4.30.

This course deals with the following topics: Forms of educational control, as national, state, municipal and private; the growth of school supervision; functions of school boards, superintendent, principal; school buildings—construction, heating, ventilation, lighting, sanitation and equipment; playgrounds; relation of supervising officers to school board, principals, teachers, pupils, janitors, parents and citizens; school management—grading, promotions, examinations, records, prizes and other incentives; courses of study from the standpoint of the superintendent; the school as a social organization; libraries, museums, other culture forces and community coöperation. Students will have the opportunity of studying the administration of the Teachers College schools and of visiting schools in the vicinity. A printed syllabus is issued for this course.

Open to seniors and graduates.

**[7]** National educational systems. Lectures, supplementary reading and reports. 2 points. Professor RUSSELL

This course is designed to present a comprehensive view of a typical foreign

school system and to aid students in making intelligent comparisons of the practical workings of this system with other systems at home and abroad. Besides the required readings outlined in the printed syllabus of this course, each student will be required to make an independent study of some state school system and to present to the class from time to time the results of his investigation. The school systems of Scotland, Ireland, Wales, Switzerland, Holland, Norway, Sweden, the British Colonies, and American States are recommended for this purpose. Specialists in various departments of school administration will be invited occasionally to conduct public conferences at the College on topics connected with the course, and several excursions will be made to typical educational institutions in the vicinity of New York in order to secure personal knowledge of their organization and management.

Not given in 1901-1902.]

**8 Secondary education. Lectures, discussions and reports. 2 points. Professor MONROE and Professor RUSSELL**  
**Tu. and Th. at 4.30.**

In this course attention is given to the historical development of secondary education in Europe and America, a comparative study of the European secondary school systems, the purposes and subject-matter of secondary education, the administration of secondary schools, the organization of the curriculum, and the general problems of secondary education. A special feature will be a series of lectures by eminent administrators and teachers of secondary schools on topics supplementary to the regular work. Students will be required to familiarize themselves with the organization and management of the Horace Mann High School, and to make special studies of other secondary schools in New York and vicinity.

Open to seniors and graduates. Required of all candidates for secondary diploma.

**9 Child study. Observation, experiments, private reading and conferences. 2 points. Professor THORNDIKE**

**Tu. and Th. at 10.30.**

This course on the physical and mental development of the child is supplementary to the prescribed course in systematic and applied psychology. It is designed to present the facts, so far as they have been scientifically determined, concerning the nature and development of the mind during childhood and adolescence, with special reference to the meaning of these facts to the teacher. It will seek to provide the student with sound criteria for estimating theories about the child's mind, and to give him adequate training in observation with special reference to the hygiene of instruction, fatigue, home study, school diseases, the ordinary defects of sight and hearing, and other functional derangements.

Open to juniors and seniors who take or have taken Psychology A and Education 3.

Required for the diplomas in elementary and kindergarten teaching.

**10** Primary teaching. Observation, discussion and lectures. 2 points. Miss WOHLFARTH

Tu. and Th. at 4.30.

This course is designed to give a thorough knowledge of the work of the first four grades such as is needed by supervisors, principals and superintendents of schools, and by critic teachers in normal schools.

Open to juniors and seniors.

**11** Theory and practice of teaching art and drawing. Lectures, conferences, observation and practical work.

2 points. Professor CHURCHILL and Mrs. CHAMBERS

M. and W. at 3.30 and 30 hours' practical work.

The aim of this course is to give the student ability to apply subject-matter which he has acquired, and to prepare him for work in the class room. The chief topics are the following: Art as a factor in public education; planning of courses and correlation with other studies; present status of school drawing; adaptation of art work to existing conditions; comparisons of the best courses of study. The course involves the working out of lessons in detail with methods of presenting them in the class room, observation of expert teaching in elementary schools, and practice-teaching under criticism as far as conditions will permit.

Open to seniors and graduates. Required for the diploma in fine arts. Prerequisite: Psychology A, Education 3 and Fine Arts 2 and 14.

**12** Theory and practice of teaching biology in the secondary school. Lectures and discussions. 2 points. Professor LLOYD and Mr. BIGELOW

M. and W. at 11.30 and 30 hours' practical work.

The work embraces a study of the aims, materials and methods involved in the teaching of botany and zoölogy in the secondary school, and is accompanied by practical work consisting of the critical study of the courses as carried out in the Horace Mann School and in other schools in New York City and vicinity, of field work for practice in the collection of materials, of the handling and preparation of experiments and materials, and of similar practical matters. Each student is required to prepare a thesis on some question pertaining to the teaching of biology. The course is designed for intending teachers in biology and for those who are preparing themselves for supervision of biological science (elementary physiology and nature study).

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (biology). Prerequisite: at least 9 points in biology.

**13** Theory and practice of teaching English in secondary schools. Lectures, reading, written work, observation and practice-teaching. 2 points. Professor BAKER

M. and W. at 9.30 and 30 hours' practical work.

This course is planned to meet the needs of intending teachers in high schools, academies and college preparatory schools. The work is as follows: (a) Literature—first half-year: interpretative and critical study of typical stories, poems, essays and dramas; principles of selection and presentation of literature in secondary schools; aims and methods of teaching literature. (b) Composition—second half year: the study of typical forms of prose with reference to their use in teaching composition; principles and methods of teaching rhetoric and composition.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (English). Prerequisite: at least 9 points in English.

**14** Theory and practice of teaching English in elementary schools. Lectures, recitations and private reading. 1½ points.

Professor BAKER

M. and W. at 1.30 (first half-year only) and 30 hours' practical work.

The course includes (a) a study of typical stories, essays and poems; principles of interpretation and criticism; principles of selection, adaptation and presentation of literature in the elementary schools; the study of interest, attention and correlation. (b) Language study—composition and grammar; observation lesson-plans and practice-teaching.

Open to juniors and seniors. Prerequisite: English 1 and 2.

**16** Theory and practice of teaching geography and geology in secondary schools. Lectures, discussions and practical work. 2 points. Professor DODGE and Miss C. B. KIRCHWEY

M. and W. at 11.30 and thirty hours' practical work.

This course is intended to meet the needs of teachers in high schools and college preparatory schools. The leading school courses in physical geography and geology will be made the basis of the work, and the admission requirements in physiography for Columbia and other leading colleges will be discussed. Each student will be called upon to organize some special subjects for school work, and to present a special report thereon (see requirements for diploma in Secondary Teaching, p. 80). The practical work will be in association with the fourth year high school class in physical geography in the Horace Mann School, though observation in neighboring high schools will be required.

Open to seniors and graduates who take or have taken Education **1, 2 and 8**, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (geography and geology). Prerequisite: 9 points in geography and geology, including Geography **2 and 3 (or 4)**, and at least 2 points in geology.

**17** Theory and practice of teaching German in secondary schools. Lectures, essays, discussions, reports of observation and practice-teaching. 2 points. Mr. BAGSTER-COLLINS

Tu. and Th. at 2.30 and thirty hours' practical work.

This course deals with the general principles underlying the teaching of living languages, with the special educational value of German, with methods and theories of teaching, and with the organization of German instruction in secondary schools.

Open to seniors and graduates who take or have taken Education **1, 2 and 8**, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (German). Prerequisite: at least 9 points in German.

**18** Theory and practice of teaching Greek in secondary schools. Lectures, reports and practical work. 3 points.

Professor LODGE

Tu., Th. and F. at 1.30 and 30 hours' practical work.

The course is divided as follows: (a) Systematic study of the Greek syntax, as presented in the various text-books of this country and of Europe—one hour weekly; (b) critical study of Xenophon's *Anabasis*, and Homer's *Iliad*, from the point of view of subject-matter, language and style—one hour weekly; (c) study of the principles of Greek pronunciation and prosody, and other matters connected with the teaching of Greek, such as the selection and arrangement of materials in a course of study and the like, supplemented by 30 hours' practical work in the Horace Mann School. This practical work may consist of observation of teaching, instruction of individuals or of groups of individuals, or regular teaching of larger classes—one hour, or its equivalent, weekly.

Open to seniors and graduates who take or have taken Education **1, 2 and 8**, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (Greek). Prerequisite: at least 9 points in Greek.

**19** Theory and practice of teaching history in secondary schools. Lectures, discussions, observation and practice-teaching. 2 points. Professor CASTLE

Tu. and Th. at 9.30 and 45 hours' practical work.

This course includes the investigation of some historical topic to illustrate the teacher's preparation and organization of historic material; methods of presenting subject-matter to the classes; practical work, including observation,

teaching and assistance ; observation and reports upon work in history in other schools; a thesis upon some particular phase of historical teaching. The conference work will consist in working out a detailed course in mediæval history for high schools, including specific references in history and literature, illustrative material and bibliographies.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (history). Prerequisite : at least 9 points in history.

**20** Theory and practice of teaching history in elementary schools. Lectures, conferences, reference work and practical work.  $1\frac{1}{2}$  points. Professor CASTLE

M. and W. at 1.30 (second half-year only) and 30 hours' practical work.

The course includes lectures on the educational value of history, its place in the curriculum and the methods of teaching it applicable to the different grades ; observation and criticism of model lessons ; preparation of lesson-plans and teaching ; valuation of text-books and courses of study.

Open to juniors and seniors. Prerequisite : History 1 and 2.

**21** Theory and practice of teaching Latin in secondary schools. Lectures, reports and practical work. 3 points. Professor LODGE

M., W. and F. at 1.30 and 30 hours' practical work.

The course is divided as follows : (a) Systematic study of the Latin syntax, as presented in the various text-books of this country and of Europe—one hour weekly; (b) critical study of Cæsar's *de bello Gallico*, and Vergil's *Æneid* from the point of view of subject-matter, language and style—one hour weekly; (c) study of the principles of Latin pronunciation, prosody and other matters connected with the teaching of Latin, such as the selection and arrangement of materials in a course of study and the like, supplemented by 30 hours' practical work in the Horace Mann School. This practical work may consist of observation of teaching, instruction of individuals or of groups of pupils or regular teaching of large classes.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (Latin). Prerequisite : at least 9 points in Latin.

**22** Theory and practice of teaching manual training. Discussions, collateral reading, observation and practice-teaching, and supplementary reading. 2 points. Professor RICHARDS

M. and W. at 11.30.

The topics considered in this course are as follows : Place of manual training in education ; relation to child nature ; problems of method ; relation of hand work to the curriculum ; possibilities as a medium of expression in the grades of the elementary school ; relation of manual training to out-of-school life; various forms of hand work ; practical requirements ; problems of supervision ; direction and maintenance of work.

For students taking the course for secondary schools the following topics are included : Manual training in the high school ; courses of shop work ; methods of presentation ; relation to industrial life.

Open to juniors and seniors who take or have taken Psychology **A** and Education **3**. Required for the diploma in manual training. Prerequisite : Manual Training **1**.

**23** Theory and practice of teaching mathematics in secondary schools. Lectures, discussions and practical work. 3 points.

Tu. and Th. at 2.30 and 30 hours' practical work.

The course includes a review of arithmetic, algebra, geometry and trigonometry, with special reference to the needs of secondary schools, and a study of the following topics : the relations of mathematics to other subjects of the curriculum ; practical applications within the scope of the secondary school ; study of the literature of the subject ; observation ; practice in preparing and teaching series of typical lessons.

Open to seniors and graduates who take or have taken Education **1**, **2** and **8**, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (mathematics). Prerequisite : at least 9 points in mathematics.

**24** Theory and practice of teaching mathematics in elementary schools. Conferences, observations and discussions. 1½ points.

M. and W. at 2.30 (second half-year only) and 30 hours' practical work.

The course includes lectures upon arithmetic, algebra and geometry, their relations to one another and to other subjects of the curriculum, particularly to science and manual training. It also offers training in the preparation of lessons, observation and practice-teaching.

Open to juniors and seniors who take or have taken Psychology **A** and Education **3**. Prerequisite : Mathematics **A**, or its equivalent.

**25** Theory and practice of teaching physical science in secondary schools. First half-year, chemistry ; second half-year, physics. Laboratory exercises, observation and practical work. 2 points. Professor WOODHULL

F., 1.30-3.30 and 30 hours' practical work.

Laboratory fee, \$2.

This course covers the selection, arrangement and treatment of subject-matter suitable for secondary schools, and a study of equipment and management of laboratories.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (physical science). Prerequisite: at least 9 points in physics and chemistry.

**28** Sources in the history of education. Lectures, required reading and discussions. 2 points. Professor MONROE  
Tu. and Th. at 11.30.

This course offers a critical study of the sources of the history of education. Selections will be made from the following writers: Homer, Aristophanes, Xenophon, Plato, Aristotle and Plutarch, of the Grecian period; Cicero and Quintilian, of the Roman period; Saint Jerome and Saint Augustine, of the patristic period; Alcuin, Rabanus Maurus and the schoolmen, of the mediæval period; Petrarch and Æneas Sylvius, of the renaissance period; Luther, Erasmus, Melanchthon and the Jesuits of the reformation period; Rabelais, Montaigne, Ascham and Mulcaster, of the later sixteenth century; Comenius, Milton and Locke, of the seventeenth century; Rousseau, of the eighteenth century; Pestalozzi, Herbart, Froebel, Spencer and others, of recent times.

Open to graduates only. Prerequisite: Education 1, or its equivalent.

**29** Seminar. Historic development of the curriculum of the secondary school. Investigation, research and discussions. 2 points. Professor MONROE  
Fr. at 1.30.

Open to qualified graduates.

**30** Seminar. Administration of public education in the United States. Investigation and research. 2 points. Professor DUTTON.  
S. at 9.30.

Open to qualified graduates.

**[31]** Practicum. The professional training of teachers. Professor RUSSELL

The practicum will be devoted to a critical study of selected topics in normal school administration, accompanied by reports and discussions on professional requirements for teachers and the methods of training teachers at home and abroad.

Given in 1900-1901; not given in 1901-1902.]

**32** Manual training. Organization of manual training. Discussions, essays and research. 2 points. Professor RICHARDS

Tu. and Th. at 1.30.

Opportunity will be afforded for selection for special study among the following topics: Organization of hand work for the elementary school, equipment for the elementary schools, costs and plans; history and practice of manual training in the United States; development and practice of manual training in Sweden, France, Germany and Russia; manual training in the high school, organization of courses, study of methods and practice, relation to technical training, equipment, costs and plans; manual training in reformatories, trade schools, organization, courses and methods.

Open to students who take or have taken Education 22, or its equivalent.

**33** The curriculum of the elementary school. Investigation, research and discussion. 2 points. Professor McMURRY assisted by heads of departments

Tu., 1.30-3.30.

In this course an outline of study in each common school subject will be proposed by the head of the department concerned. This outline will be the basis for careful discussion—the head of the department being present to present controlling ideas and meet objections—and will also be compared with other printed curricula of the best schools of the country. In the latter part of the year, after the subject-matter in individual subjects has been provisionally determined, the proper correlation of the various studies will be especially considered.

Open to graduate students only.

**34** Kindergarten principles. Discussions, collateral reading and essays. 2 points. Professor RUNYAN

M. and W. at 2.30.

This course aims to give a comprehensive knowledge of the educational principles upon which the kindergarten system is based. A thorough study is made of Froebel's books, especially *The Education of Man*, with constant reference to other authorities in kindergarten and general educational theory.

Open to seniors and graduates. Required for the kindergarten diplomas. Prerequisite: Kindergarten 1 and 2.

**35** Kindergarten and primary teaching. Lectures, written reports and observation in the kindergarten. 2 points. Miss O'GRADY

Tu. and Th. at 11.30.

The purpose of this course is to give a general idea of the principles and

methods of the kindergarten for the benefit of students preparing for other branches of educational work; then to examine the modifications of these methods, found useful in the elementary school, in summer schools and playgrounds, and in the various plans of social and industrial education, for undeveloped races and backward children; and finally, to assist students in working out original ideas on the same lines.

Open to seniors and graduates.

**36** Kindergarten method and practice. (a) Lectures, discussions and preparations of lesson-plans. 2 points. Miss O'GRADY. M., W. and F. at 1.30. (b) Observation and practice in teaching. Hours and credit to be arranged. Professor RUNYAN, Miss O'GRADY and Miss BLAKE

This course aims to make practical application of the knowledge of principles gained in other courses. The kindergarten materials are considered both psychologically and practically, and plans for the yearly program are prepared and discussed. Finally the student's theoretical knowledge is tested and converted into power by daily experience under careful criticism in the kindergarten for a half-year.

Open to seniors and graduates. Required for the kindergarten diploma. Prerequisite: Kindergarten 1.

Graduate students in kindergarten may take (a) without (b).

**37** Theory and practice of teaching geography in elementary schools. Lectures, discussions and practical work. 1½ points. Geikie's *The Teaching of Geography*, Tarr and McMurry's *North America*. Professor DODGE and Miss C. B. KIRCHWEY

M. and W. at 2.30 (first half-year only) and 30 hours' practical work.

This course will include a discussion of the principles underlying the grade school course in geography, and the division of the course in accordance with those conditions. A special study will be made of the teaching of North America.

Open to juniors and seniors who take or have taken Psychology A and Education 3. Prerequisite: Geography 6, or its equivalent.

**38** Theory and practice of teaching domestic art. Lectures, conferences and practical work. 2 points. Professor WOOLMAN

W. and F. at 11.30 and 30 hours' practical work.

This course considers the relation of domestic art to the aims and means of education; methods of teaching it in public, industrial and mission schools;

correlation with other grade work; the planning of courses of study and the problems of equipment and cost.

Open to seniors. Required for the diploma in domestic art. Prerequisite: Psychology **A**, Education **3**, Manual Training **1** and Domestic Art **1, 2** and **3**.

**39** Domestic art. Supervision and critic teaching in domestic art. Conferences and practical work. 2 points. Professor **WOOLMAN**

M. and W. at 3.30 and 30 hours' practical work.

This course deals with the place of domestic art in modern education and economics; the comparative study of courses of work and equipment in representative schools at home and abroad; the organization and management of departments, supervision of city schools and critic teaching in normal schools; the planning and furnishing of class-rooms and laboratories, and the collection and use of illustrative material.

Open to seniors and graduates. Prerequisite: Education **38**, Domestic Art **1, 2, 3** and **5**.

**40** Theory and practice of teaching domestic science. Lectures, conferences and practical work. 2 points. Professor **KINNE**

M. and W. at 1.30 and 30 hours' practical work.

This course is designed to present methods of teaching domestic science in schools of all grades. It includes the consideration of courses of study and their relation to the school curriculum, and the planning and presentation of lessons. The practical work consists of observation, assistance and teaching in school classes, the planning of laboratory equipment, and assistance in the management of the departmental housekeeping.

Open to seniors. Required for the diploma in domestic science. Prerequisite: Psychology **A**, Education **3**, and Domestic Science **1**, or its equivalent.

**41** Theory and practice of teaching nature study in elementary schools. Lectures, discussions and practical work. 2 points. Miss **CARSS**

F., 1.30-3.30 and 30 hours' practical work.

The course involves a critical study of the work in the Horace Mann Elementary School.

Open to juniors and seniors who take or have taken Biology **5**, or its equivalent.

**42** Supervision and critic teaching in domestic science. Conferences and practical work. 2 points. Professor **KINNE**

Tu. and Th. at 2.30 and 30 hours' practical work.

This course affords opportunity for practical investigation of conditions and

problems in domestic science teaching in schools, colleges, universities, clubs and social settlements. It includes a study of the development and present status of domestic science at home and abroad, the organization and management of departments, supervision in city schools, and critic teaching in normal schools.

Open to seniors and graduates. Prerequisite: Education 40.

**43** Theory and practice of teaching music. Lectures and practical work. 2 points. Professor FARNSWORTH

Tu. and Th. at 4.30 and 30 hours' practical work.

This course includes a consideration of the peculiar difficulties that arise in the teaching of music; the history and present position of music in the schools; the choice and use of methods and teaching materials; the observation of teaching and the preparation and giving of lessons.

Open to seniors who take or have taken Music 1. Required for the diploma in music. Prerequisite: Psychology A, Education 3 and Music 2.

## SUMMARY OF COURSES IN EDUCATION

### History and Philosophy of Education

- 1** History of education. 2 or 3 points. Professor MONROE
- 2** Principles of education. 2 points. Professor BUTLER
- 28** Sources in the history of education. 2 points. Professor MONROE
- 29** Seminar. Historic development of curriculum of the secondary school. 2 points. Professor MONROE
- 33** The curriculum of the elementary school. 2 points. Professor McMURRY

### Educational Administration

- 6** School administration. 2 points. Professor DUTTON
- 30** Seminar. Administration of public education in the United States. 2 points. Professor DUTTON
- 7** National educational systems. 2 points. Professor RUSSELL
- 31** Practicum. The professional training of teachers. Professor RUSSELL

### Psychology and Child Study

- Psychology A Elements of psychology. Professor THORNDIKE
- 3** Applications of psychology in teaching. Professor THORNDIKE
- 9** Child study. 2 points. Professor THORNDIKE
- Psychology II Genetic psychology, advanced course. 2 points. Professor THORNDIKE
- Psychology 13 Genetic and comparative psychology. 2 or more points. Professor THORNDIKE

**Theory and Practice of Teaching in the Secondary School and College**

- 8 Secondary education. 2 points. Professor MONROE
- 12 Biology. 2 points. Professor LLOYD and Mr. BIGELOW
- 13 English. 2 points. Professor BAKER
- 16 Geography and geology. 2 points. Professor DODGE
- 17 German. 2 points. Mr. BAGSTER-COLLINS
- 18 Greek. 3 points. Professor LODGE
- 19 History. 2 points. Professor CASTLE
- 21 Latin. 3 points. Professor LODGE
- 22 Manual training. 2 points. Professor RICHARDS
- 23 Mathematics. 3 points
- 25 Physical science. 2 points. Professor WOODHULL
- 32 Manual training. 2 points. Professor RICHARDS
- 38 Domestic art. 2 points. Professor WOOLMAN
- 39 Domestic art. Supervision and critic teaching. 2 points. Professor WOOLMAN
- 40 Domestic science. 2 points. Professor KINNE
- 42 Domestic science. Supervision and practice teaching. 2 points. Professor KINNE
- 43 Music. 2 points. Professor FARNSWORTH

**Theory and Practice of Teaching in the Elementary School and Kindergarten**

- 4 General method and practice teaching. 2, 3 or 4 points. Professor McMURRY
- 5 Supervision and critic teaching. 3 or 4 points. Professor McMURRY
- 10 Primary teaching. 2 points. Professor McMURRY
- 11 Drawing. 2 points. Professor CHURCHILL and Mrs. CHAMBERS
- 14 English.  $1\frac{1}{2}$  points. Professor BAKER
- 20 History.  $1\frac{1}{2}$  points. Professor CASTLE
- 22 Manual training. 2 points. Professor RICHARDS
- 24 Mathematics.  $1\frac{1}{2}$  points
- 32 Manual training. 2 points. Professor RICHARDS
- 34 Kindergarten principles. 2 points. Professor RUNYAN
- 35 Kindergarten and primary teaching. 2 points. Miss O'GRADY
- 36 Kindergarten method and practice. 2 points. Professor RUNYAN, Miss O'GRADY and Miss BLAKE
- 37 Geography.  $1\frac{1}{2}$  points. Professor DODGE and Miss C. B. KIRCHWEY
- 38 Domestic art. 2 points. Professor WOOLMAN
- 39 Domestic art. Supervision and critic teaching. 2 points. Professor WOOLMAN
- 40 Domestic science. 2 points. Professor KINNE
- 41 Nature study. 2 points. Miss CARSS
- 42 Domestic science. Supervision and critic teaching. 2 points. Professor KINNE
- 43 Music. 2 points. Professor FARNSWORTH

**BIOLOGY**

**Education 12** Theory and practice of teaching biology in the secondary school. Lectures and discussions. 2 points. Professor LLOYD and Mr. BIGELOW

M. and W. at 11.30 and 30 hours' practical work.

The work embraces a study of the aims, materials and methods involved in the teaching of botany and zoölogy in the secondary school, and is accompanied by practical work consisting of the critical study of the courses as carried out in the Horace Mann School and in other schools in New York City and vicinity, of field work for practice in the collection of materials, of the handling and preparation of experiments and materials, and of similar practical matters. Each student is required to prepare a thesis on some question pertaining to the teaching of biology. The course is designed for intending teachers in biology and for those who are preparing themselves for supervision of biological science (elementary physiology and nature study).

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (biology). Prerequisite: at least 9 points in biology.

**Education 41** Theory and practice of teaching nature study in elementary schools. Lectures, discussions and practical work. 2 points. Miss CARSS

Tu. and Th. at 1.30 and 30 hours' practical work.

The course involves a critical study of the work in the Horace Mann Elementary School.

Open to juniors and seniors who take or have taken Biology 5, or its equivalent.

**1** Botany. Lectures, laboratory work, recitations, excursions for field-work and collateral reading. 2 points. Professor LLOYD

Tu. and F., 9.30-11.30.

Laboratory fee, \$2.

The course treats of the following topics: General morphology of plants, both phanerogams and cryptogams; more detailed study of seeds and germination; general plant physiology; ecology, plants and their environment.

Open to freshmen, sophomores and juniors. May be offered in the collegiate course in partial fulfillment of the requirements in science.

**2** Zoölogy. Lectures, laboratory work and collateral reading, with recitations. 2 points. Mr. BIGELOW

Tu. and F., 1.30-3.30.

Laboratory fee, \$2.

This course includes the study of a series of types of animals, both invertebrate and vertebrate.

Open to freshmen, sophomores and juniors. May be offered in the collegiate course in partial fulfillment of the requirements in science.

**3** Physiology and hygiene. Lectures, recitations and laboratory work. 2 points. Professor LLOYD and Mr. BIGELOW

M. and W., 9.30-11.30.

Laboratory fee, \$2.

This course involves a study of the activity of cells, tissues and organs in various organisms, both plants and animals, including man, and a study of the fundamental principles of hygiene.

Open to sophomores, juniors and seniors. Required for the diploma in domestic science. Prerequisite: Biology 1, 2 or 5.

**5** Biological nature study. Lectures, laboratory work, recitations and collateral reading. 2 points. Professor LLOYD and Mr. BIGELOW

Tu. and Th., 3.30-5.30.

Laboratory fee, \$2.

The first half-year is devoted to botany; the second half-year to zoölogy. The course comprises an elementary study of plants and animals, and the materials and types are those which are the more readily adaptable to the elementary grades.

Open to sophomores, juniors and seniors.

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The following courses offered in other departments of the University are open to duly qualified students in Teachers College:

Elementary botany, Comparative anatomy of vascular plants, Plant physiology, General morphology of cryptogams, Botanical problems, Determination of phanerogams, Elementary biology, General zoölogy, Bacteriology and Household chemistry.

A special circular of these courses will be sent on application to the Secretary of Columbia University.

#### DOMESTIC ART

**Education 38** Theory and practice of teaching domestic art. Lectures, conferences and practical work. 2 points. Professor WOOLMAN

W. and F. at 11.30 and 30 hours' practical work.

This course considers the relation of domestic art to the aims and means of

education; methods of teaching it in public, industrial and mission schools; correlation with other grade work; the planning of courses of study and the problems of equipment and cost.

Open to seniors. Required for the diploma in domestic art. Prerequisite: Psychology A, Education 3, Manual Training 1, and Domestic Art 1, 2 and 3.

**Education 39** Domestic art. Supervision and critic teaching in domestic art. Conferences and practical work. 2 points. Professor WOOLMAN

M. and W. at 3.30 and 30 hours' practical work.

This course deals with the place of domestic art in modern education and economics; the comparative study of courses of work and equipment in representative schools at home and abroad; the organization and management of departments; supervision in city schools and critic teaching in normal schools; the planning and furnishing of class-rooms and laboratories, and the collection and use of illustrative material.

Open to seniors and graduates. Prerequisite: Education 38, and Domestic Art 1, 2, 3 and 5.

**1** Domestic art hand work. Demonstration, discussion and practice. 1 point. Professor WOOLMAN and Miss ANTHONY F., 9.30-11.30.  
Laboratory fee, \$2.

This course includes a systematic series of models covering the ground of plain needlework; the application in various articles; advanced basketry and raffia work; Text-book: Woolman's *Sewing Course*.

Open to juniors and seniors. Required for the diploma in domestic art.

**2** Textiles. Lectures, discussions and essays. 2 points. Professor WOOLMAN

Tu. and Th. at 11.30.

The course covers a study of fabrics, the processes of their manufacture, the development of these processes, and their effect on social conditions. It is complementary to Domestic Art 1 and Education 38, and is intended to give a knowledge of textiles and methods of presentation in connection with the lessons in sewing.

Open to juniors and seniors. Required for the diploma in domestic art.

**3** Drafting and making garments. Demonstrations, conferences and manual work. 3 points. Miss SCHENCK

Tu. and Th., 1.30-3.30.

Laboratory fee, \$3.

The following topics are considered: the principles of dressmaking; the taking of accurate measurements; drafting by simple measurements; economical cutting of material; the making of garments.

Open to juniors and seniors who take or have taken Domestic Art 1. Required for the diploma in domestic art.

**5** Household art and design. Lectures, discussions and class work. 2 points. Professor WOOLMAN, Miss ROGERS and Miss PENISTON

M., 9.30-11.30 and W. at 9.30.

This course is complementary to Fine Arts 9 and 13, and aims to apply general rules of art in the home in order to develop good taste and appreciation of beauty in every-day life. It includes (a) consideration of healthful living and dressing, the effects of textiles, and the principles of home decoration; (b) training in rapid sketching and designing; (c) the use of needle in applying these principles to articles of home and ceremonial use.

Open to juniors and seniors who take or have taken Domestic Art 1, 2 3 and Fine Arts 9. Required for the diploma in domestic art. The third section of this course (c, above) may be elected separately by qualified students.

**8** Drafting and dressmaking, advanced course: millinery. Demonstrations and manual work. 2 points. Miss SCHENCK and other instructors

Tu. and Th., 9.30-11.30.

Laboratory fee, \$3.

This course offers instruction in a system of drafting and provides training in the making of patterns, gowns and jackets, and the making and trimming of hats and bonnets.

Open to juniors and seniors. Prerequisite: Domestic Art 3, or its equivalent.

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A special circular of this department will be sent on application to the Secretary.

#### DOMESTIC SCIENCE

**Education 40** Theory and practice of teaching domestic science. Lectures, conferences and practical work. 2 points. Professor KINNE

M. and W. at 1.30 and 30 hours' practical work.

This course is designed to present the methods of teaching domestic science in schools of all grades. It includes the consideration of courses of study and their relation to the school curriculum, and the planning and presentation of lessons. The practical work consists of observation, assistance and teaching in school classes, the planning of laboratory equipment, and assistance in the management of the departmental housekeeping.

Open to seniors. Required for the diploma in domestic science. Prerequisite: Psychology A, Education 3 and Domestic Science 1, or its equivalent.

**Education 42** Supervision and critic teaching in domestic science. Conferences and practical work. 2 points. Professor KINNE

Tu. and Th. at 2.30 and 30 hours' practical work.

This course affords opportunity for practical investigation of conditions and problems in domestic science teaching in schools, colleges, universities, clubs and social settlements. It includes a study of the development and present status of domestic science at home and abroad, the organization and management of departments, supervision in city schools, and critic teaching in normal schools.

Open to seniors and graduates. Prerequisite: Education 40.

**1** Foods. Lectures, laboratory work, essays and collateral reading. 4 points. Professor KINNE and Mrs. FORREST

M. and W., 1.30-4.30, and F. at 1.30.

Laboratory fee, \$7.

This course covers the following general topics: Composition and nutritive value of foods; fundamental principles and processes of cookery; comparative study of fuels and cooking apparatus. It is designed to give a thorough knowledge of theory and practice in cooking, and to aid the student in arranging subject-matter for teaching. Special attention is given to scientific methods of laboratory work, and to the adaptation of such methods to the school.

Open to juniors and seniors. Required for the diplomas in domestic science and domestic art.

**2** Food production and manufacture. Lectures, laboratory work, reading and excursions. 2 points.

F., 9.30-11.30.

This course is complementary to Course 1, covering the following special topics: the production of food materials, such as dairy products; manufacture of flours, cereals, spices, etc.; food adulterations and other processes in the preparation of food materials.

Open to juniors and seniors. Required for the diploma in domestic science.

**3** Foods, advanced course. 4 points. Professor KINNE and Mrs. FORREST

Tu. and Th., 9.30-12.30, and F. at 2.30.

Laboratory fee, \$10.

This course elaborates and applies the principles established in Course 1. It takes up advanced cookery; preservation of food; cookery for invalids and

children ; food values and dietaries ; planning, cooking and serving of meals ; a waitresses' course and marketing.

Open to seniors. Required for the diploma in domestic science. Prerequisite : Domestic Science 1 and 2.

Students admitted to advanced standing may elect either half of the course separately. Advanced students will have opportunity for special research in dietetics.

**4** Home sanitation and economics. Conferences, lectures laboratory work and collateral reading. 2 points.

W., 9.30-12.30.

The course embraces the following subjects :—first half-year : situation and structure of the house, water supply, disposal of waste, heating and ventilation, lighting, healthful furnishing, cleansing of the house; second half-year, development and organization of the home and its adaptation to modern conditions, systematic methods of housekeeping, the cost of living and household accounts, domestic service.

Students admitted to advanced standing and candidates for the higher diploma may elect either half of the course separately.

Open to juniors and seniors. Required for the diploma in domestic science.

**6** Bacteriology. Lectures and laboratory work. 1 point.  
Mr. BIGELOW

M. and W., 9.30-11.30.

This is a course in applied bacteriology. The lectures, which are associated with practical laboratory work in illustration of the themes, deal with the nature of bacteria and the methods of isolation and recognition of species ; the part which bacteria play in nature, and the industrial uses to which they are put ; the bacteria of air, water, ice, milk, and foods generally ; the methods of sterilization and disinfection ; the relation of bacteria to disease, and, in connection with this, certain phases of hygiene and household sanitation, and the care of the sick.

Open to juniors and seniors who take Biology 3.

This course is given during the second half-year in connection with Biology 3. Students who elect this course must make arrangements with the instructor in advance.

**7** Household chemistry. Lectures, reading and laboratory work. 2 points. Dr. VULTÉ

Tu. and Th., 9.30-11.30.

Laboratory fee, \$5.

This is a course of instruction designed to present the study of the principal food products, such as sugars, starches, proteids, animal and vegetable fats, water and mineral salts, special attention being given to the changes taking place during the operations of cooking, and to the analytical tests applied to them ; the chemical aspects of fermentation and putrefaction, prevention of

the same by chemical means, and sterilization ; corrosive action of food constituents, acids, etc., on utensils ; saponification, action of detergents, hard and soft water ; testing of milk, butter, cheese, water, etc., for purity ; the chemistry of fuels and illuminants.

Open to juniors and seniors. Required for the diploma in domestic science. Prerequisite : Physical Science 1, or its equivalent.

**8** Home nursing and emergencies ; laundering. Lectures and practice work. 2 points.

M., 9.30-12.30.

The work in home nursing and emergencies consists of lectures with practical illustrations and experiments on the part of the students, and affords training for teaching the subject in schools. It is conducted by a trained nurse. The course in laundering includes both theory and practice, with an equipment which can be used in the common schools.

Open to juniors and seniors.

**9\*** Household chemistry, advanced course. Lectures and laboratory work. 2 points.

Hours to be arranged. Laboratory fee to cover expense of supplies and materials.

This course offers opportunity for original research in the working out of problems that arise in the preparation of food, the use of fuels and cooking apparatus, and in laundering and other cleansing processes, and is intended for advanced students who have a knowledge of elementary and organic chemistry.

Open to seniors and graduates. Prerequisite : Domestic Science 7, or its equivalent.

A special circular of this department will be sent on application to the Secretary.

**HOSPITAL ECONOMICS**

**I** Methods and practice. Observation, conference, discussion and practical work. 1 point.

Hours to be arranged.

This course is designed to meet the needs of teachers in training-schools for nurses and superintendents of hospitals. It discusses the principles which underlie training-school work and provides opportunity for the practical application of these principles in teaching.

Open to qualified students. Required of special students in hospital economics.

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\* This course is offered tentatively pending the appointment of an instructor.

**2** Organization and administration. Lectures, essays and discussions. 2 points.

Hours to be arranged.

This course deals with the problems connected with the organization and management of training-schools and hospitals. The following topics will indicate its general scope: 1. Training-school organization and management,—construction and equipment, planning of the curriculum with special reference to securing a uniform course in the various schools, instruction and grading of students, and all other matters connected both with material and with educational interests. 2. Hospital organization and management,—construction and equipment, organization of ward work, relations to trustees and hospital staff, and other requirements in general administration.

Open to qualified students. Required of special students in hospital economics.

A special circular of this department will be sent on application to the Secretary.

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## ECONOMICS AND SOCIAL SCIENCE

### *Courses in Columbia and Barnard*

Economics <b>A</b>	Outlines of Economics
Economics <b>1</b>	Economic History of England and America
Economics <b>3</b>	Practical Political Economy
Economics <b>4</b>	Science of Finance
Economics <b>5</b>	Fiscal and Industrial History of the United States
Economics <b>8</b>	History of Economics
Economics <b>11</b>	Communistic and Socialistic Theories
Economics <b>12</b>	Theories of Social Reform
Economics <b>14</b>	Seminar in Political Economy and Finance
Sociology <b>15</b>	Principles of Sociology
Sociology <b>16</b>	Racial Demography
Sociology <b>17</b>	Statistics and Sociology
Sociology <b>18</b>	Statistics and Economics
Sociology <b>19</b>	Theory, Technique and History of Statistical Science
Sociology <b>20</b>	Social Evolution
Sociology <b>21</b>	Progress and Democracy
Sociology <b>22</b>	Pauperism, Poor Laws and Charities

Sociology 23 Crime and Penology  
 Sociology 24 The Civil Aspects of Ecclesiastical Organization  
 Sociology 29 Laboratory Work in Statistics  
 Sociology 30 Seminar in Sociology  
 A special circular of these courses will be sent on application to the Secretary of Columbia University.

### ENGLISH

Education 13 Theory and practice of teaching English in secondary schools. Lectures, reading, written work, observation and practice-teaching. 2 points. Professor BAKER

M. and W. at 9.30 and 30 hours' practical work.

This course is planned to meet the needs of intending teachers in high schools, academies and college preparatory schools. The work is as follows : (a) Literature—first half-year : interpretative and critical study of typical stories, poems, essays and dramas; principles of selection and presentation of literature in secondary schools; aims and methods of teaching literature. (b) Composition—second half-year : the study of typical forms of prose with reference to their use in teaching composition; principles and methods of teaching rhetoric and composition.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (English). Prerequisite : at least 9 points in English.

Education 14 Theory and practice of teaching English in elementary schools. Lectures, recitations and private reading. 1½ points. Professor BAKER

M. and W. at 1.30 (first half-year only) and 30 hours' practical work.

The course includes (a) a study of typical stories, essays and poems; principles of interpretation and criticism; principles of selection, adaptation and presentation of literature in the elementary schools; the study of interest, attention and correlation. (b) language study—composition and grammar : observation, lesson-plans and practice-teaching.

Open to juniors and seniors. Prerequisite : English 1 and 2.

I Composition and literature. 3 points. MR. ABBOTT

M., W. and F. at 11.30.

(a) First half-year. Rhetoric and English composition. Recitations, lectures and daily themes.

This course is an elementary one, designed to teach correctness and clearness of expression. There is opportunity for practice in the simpler forms of narrative, descriptive and expository writing.

(b) Second half-year. Interpretative and critical study of literature. Recitations, lectures and essays.

This course is designed to introduce the student to several periods in the development of English literature. The comedies of Shakspere and representative works of Milton and of Pope will be studied. There will also be assigned readings in the works of Dryden, Addison and Steele, Jane Austen and Scott.

Open to freshmen, sophomores and juniors. Required in the collegiate course.

**2** Interpretative and critical study of literature. English composition. Recitations, lectures, written reports and essays.

2 points. Professor BAKER and Dr. KRAPP

Tu. and Th. at 11.30.

The tragedies of Shakspere, and representative works of Tennyson, Browning and Arnold will be read. There will also be assigned readings in the minor contemporary poets and in the works of Thackeray, George Eliot and Hawthorne.

Open to freshmen, sophomores and juniors. Required in the collegiate course. Prerequisite: English I.

**3** The folk-story. Lectures and reading. 1 point. Dr. KRAPP

Tu. and Th. at 2.30 (second half-year only).

The purpose of the course is to open to the general reader the storehouse of popular narrative literature. The course will deal with typical collections from the literatures of different periods and peoples, beginning with the collections of the East and coming down through the Western literature of fable, fairy tale, myth and popular romance.

Open to juniors and seniors. Prerequisite: English I.

**4** Reading. Breathing; tone placing; drill in elemental English sounds; vocal and pantomimic expression; readings from Shakspere and Browning. 1 point.

M. and W. at 9.30.

Open to sophomores, juniors and seniors.

This course is offered tentatively pending the appointment of an instructor.

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The following courses in other departments of the University are open to duly qualified students in Teachers College:

English composition (3 courses); Argumentative composition; Theory of

English usage; Anglo-Saxon and historical English grammar; Anglo-Saxon literature; Chaucer; Shakespeare; American literature; The history of the English novel; A survey of English poetry from the Elizabethan age to modern times; English language and literature of the Fourteenth and Fifteenth Centuries; English verse-forms, dramatists of the Nineteenth Century; English comedy, its history and its methods; English literature from 1789 to the death of Tennyson; English literature from 1660 to 1789; English literature from the birth of Shakespeare to 1660; The theory, history and practice of criticism; Studies in literature, mainly critical; History of lyric poetry in the Middle Ages and the Renaissance; The revival of romanticism in the Eighteenth Century, and Aspects of modern poetry.

A special circular of these courses will be sent on application to the Secretary of Columbia University.

#### FINE ARTS

**Education 11** Theory and practice of teaching art and drawing. Lectures, conferences, observation and practical work. 2 points. Professor CHURCHILL and Mrs. CHAMBERS

M. and W. at 3.30 and 30 hours' practical work.

The aim of this course is to give the student ability to apply subject-matter which he has acquired, and to prepare him for work in the class-room. The chief topics are the following: Art as a factor in public education; planning of courses and correlation with other studies; present status of school drawing; adaptation of art work to existing conditions; comparisons of the best courses of study. The course involves the working out of lessons in detail with methods of presenting them in the class-room, observation of expert teaching in elementary schools and practice-teaching under criticism as far as conditions will permit.

Open to seniors and graduates. Required for the diploma in fine arts. Prerequisite: Psychology A, Education 3 and Fine Arts 2 and 14.

**1 Elementary freehand drawing.** 2 points. Miss ROGERS

Two sections: (a) Tu. and Th., 9.30-11.30; (b) Tu. and Th., 1.30-3.30.

This course is intended to give elementary training in drawing, including blocking in, pencil measurement, etc., drawing by judgment and feeling supported by sound method, work with groups of still-life and geometric solids, above, below and on a level with the eye, poses, etc.

Open to freshmen, sophomores and juniors. Required of students in the collegiate course who do not offer freehand drawing for admission.

**2 Studio work—preparatory.** 2 or 3 points. Mr. Von SALTZA

M., Tu. and W., 1.30-3.30.

Studio fee, \$2.

The course offers training in sound method and correct construction, and includes charcoal work from still-life, plants, vegetables, casts and the posed figure, in outline and light and shade. Simplicity and breadth are sought rather than finish. The course prepares the student for advanced studio work in drawing and painting.

Open to juniors and seniors. Prerequisite: Fine Arts 1, or its equivalent.

**3** Drawing and painting. Individual studio work, with instructions to meet the needs of each student. 3 points.

Mr. ROBINSON

M., Tu. and W., 9.30-11.30.

Studio fee, \$2.

This course gives the severe discipline in proportion, constructions and values necessary as a preparation for work in teaching, and for profitable study from nature in color. It offers practice in full values in charcoal from casts (made from life and the antique), still-life and posed figure, and introduces work in water color. It also includes a one-hour course in perspective and anatomy.

Open to juniors and seniors. Required for the diploma in fine arts. Prerequisite: Fine Arts 2, or its equivalent.

**4** Drawing and painting—advanced. Individual studio work, with instruction to meet the needs of each student.

3 points. Mr. ROBINSON

M., Tu. and W., 9.30-11.30.

Studio fee, \$2.

The course aims to give strength in perception of values and color which will enable the student independently to do creditable work, and prepare him for teaching in primary and secondary schools. It includes work in charcoal, monochrome, and water color or in oil painting at the discretion of the teacher, from still-life, casts and posed figure, with outdoor work in the spring and fall when possible.

Open to seniors. Required for the diploma in fine arts. Prerequisite: Fine Arts 3, or its equivalent.

**5** Anatomy—modeling in clay and drawing. 1 point.

Mr. SMITH

S., 9.30-11.30.

Studio fee, \$1.

This course includes a study of the proportions, action and construction of the human body from the artist's standpoint. It aims to supplement study from life and to strengthen the student in accurate observation.

Open to juniors and seniors. Prerequisite: Fine Arts 2, or its equivalent.

**6** Sketch class. 2 points—3 hours in class-room and 1 hour outside work. Mr. ROBINSON

Th. at 9.30-12.30.

This course includes sketching and drawing, largely from costumed models, in values with various media, outside sketching and composition for criticism, and out-of-door sketching in oil.

Open to juniors and seniors who take or have taken Fine Arts 2. Required for the diploma in fine arts.

**7** Sketch class—advanced. 2 points—3 hours in class-room and 1 hour outside work. Mr. ROBINSON

Th., 9.30-12.30.

This course is a continuation of Course 6.

Open to seniors. Prerequisite: Fine Arts 6.

**8** Clay modeling. 1 point. Mr. SMITH

Two sections: (a) Th., 9.30-11.30; (b) S., 9.30-11.30.

Studio fee, \$1.

This course is designed to give definite conceptions of form, and to prepare teachers for work with clay in the first four or five grades of the elementary school. It offers elementary form study with clay, work from casts and the posed figure, and original construction in clay.

Open to juniors and seniors who take or have taken Fine Arts 1. Required for the diploma in fine arts.

**9** Design. Class work with lectures. Miss ROGERS. Two sections: (a) 2 points; (b) 1 point.

(a) M., 1.30-3.30 and outside work; (b) S., 9.30-11.30.

The aim of this course is to develop a sense of what is appropriate and beautiful in design, and the power to create it. The course begins with a series of graded problems in the original arrangement of line and space-values. This is followed by a series of original problems in black and white spots, and design in color. Use of time-saving devices is encouraged.

Open to juniors and seniors. Required for the diploma in fine arts. Prerequisite: Fine Arts 1, or its equivalent.

**10** Design—advanced course. 2 points. Miss ROGERS  
Th. and F., 1.30-3.30.

This course includes invention of arrangements in light and dark tones and in color, as applied to book-covers, pages, wall-paper, textiles, etc. The course is planned to give increased power in the matter studied under Course 9.

Open to seniors. Required for the diploma in fine arts. Prerequisite: Fine Arts 9.

**II** Wood carving. Class work and individual instruction.  
2 points. Miss ROGERS  
M. and W., 9.30-11.30.  
Studio fee—cost of materials.

This course is devoted to the actual practice of design, suggesting various ways of carrying out design in the schools with the pencil, knife, hot poker, scissors, brush, etc. It includes wood-carving, pyrography, iron- and leather-work, and the making of screens, portieres, etc., with patterns in coarse needle-work, taking up in connection with this work a consideration of materials and conditions.

Open to juniors and seniors who take or have taken Fine Arts 9.

**I2** Wood carving. 2 points. Miss ROGERS  
M. and W., 9.30-11.30.  
Studio fee—cost of materials.

This course offers the opportunity to specialize in wood carving. Attention is given to the execution of original and adapted design in furniture and objects of art.

Open to seniors. Prerequisite: Fine Arts 11.

**I3** Art interpretation. Lectures, collateral reading, visits to museums, etc. 1 point. Professor CHURCHILL  
S. at 11.30.

The course offers a study of the elements of appreciation and criticism. It aims to cultivate the æsthetic sense. The work of art is studied from the standpoint of its content rather than its historical relations. The various qualities of art are taken up and discussed. A sympathetic insight into the points of view of artists of many schools is sought. Autographic and reproductive processes and other topics calculated to aid in understanding the scope and meaning of art are considered. The course serves as a basis for general reading in art history and criticism. Students are required to have Hamlin's *History of Architecture*, Marquand's *History of Sculpture* and Hoyt's *The World's Painters*.

This course is given in alternate years with Fine Arts 15.

Open to juniors and seniors. Required for the diploma in fine arts.

**I4** Applied freehand drawing. 2 points. Professor CHURCHILL  
Tu. and Th., 1.30-3.30.

The purpose of this course is to develop power to use drawing as an aid in teaching young children, and to train teachers for teaching drawing intelligently under supervision. It includes application of drawing to the teacher's work in elementary classes,—illustration on the blackboard, rapid sketching in

chalk and pencil, according to correct principles; simple studies of animals and posed figure; elementary design and water color.

Open to juniors and seniors. Required for the diploma in fine arts. Prerequisite: Fine Arts 1, or its equivalent.

**15** History of Art. Lectures, collateral reading and instruction in museums, etc. 1 point. Professor CHURCHILL and Mr. KELLOGG

S. at 11.30.

This course is supplementary to Course 13. It takes up the development of art historically, illustrating by means of lantern slides and museum work, and involves a critical study of great styles and masterpieces, ancient and modern, in architecture, sculpture and painting. Students are required to have books mentioned under Course 13.

This course is given in alternate years with Fine Arts 13. Not given in 1901-02.

Open to juniors and seniors. Required for the diploma in fine arts.

**16** Portrait and costumed model. 3 points. Mr. VON SALTZA

M., Tu. and W., 1.30-3.30.

Studio fee, \$2.

Drawing and painting from life in charcoal and oil colors. Out-of-door work in suitable weather at discretion of teacher.

Open to seniors. Required for the diploma in fine arts. Prerequisite: Fine Arts 3.

A special circular of this department will be sent on application to the Secretary.

#### FRENCH

**17** Teachers' course. Lectures, essays, reports and practical exercises. 2 points. Professor COHN

M. and W. at 2.30.

This course is designed for students who intend to teach French. The various methods now used in teaching French and the comparative value of classroom exercises will be discussed. Time will be devoted also to a study of the component parts of the French sentence, and to explanations needed by pupils for a thorough understanding of the principles and main facts of French grammar.

Not given in 1901-1902; will be repeated in 1902-1903.

**A**—Elementary course. Teachers College Section. 3 points. M., W. and F. at 2.30.

Open to freshmen, sophomores and juniors. Required of students in the collegiate course who do not offer French for admission.

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The following courses given in other departments of the University are open to duly qualified students in Teachers College:

History of French literature during the Seventeenth Century; History of French literature during the Eighteenth Century, especially Voltaire; History of French literature during the Eighteenth Century, especially Rousseau, Montesquieu and the Encyclopedists; The literary movement in France during the first half of the Nineteenth Century; The literary movement in France during the second half of the Nineteenth Century; History of literary criticism in France; History of the French language, old French (2 courses); French literature of the Sixteenth Century; Critical bibliography of French literature from the Sixteenth to the end of the Nineteenth Century and a seminar; Special topics in romance literature.

#### GEOGRAPHY

**Education 16** Theory and practice of teaching geography and geology in secondary schools. Lectures, discussions and practical work. 2 points. *Davis' Physical Geography* and *Report of Committee on College Entrance Requirements of National Educational Association*. Professor DODGE and Miss C. B. KIRCHWEY

M. and W. at 11.30 and 30 hours' practical work.

This course is intended to meet the needs of teachers in high schools and college preparatory schools. The leading school courses in physical geography and geology will be made the basis of the work, and the admission requirements in physiography for Columbia and other leading colleges will be discussed. Each student will be called upon to organize some special subjects for school work, and to present a special report thereon (see requirements for diploma in secondary teaching, p. 80). The practical work will be in association with the fourth year high school class in physical geography in the Horace Mann School, though observation in neighboring high schools will be required.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Prerequisite: 9 points in geography and geology, including Geography 2 and 3 (or 4), and at least 2 points in geology.

**Education 37** Theory and practice of teaching geography in elementary schools. Lectures, discussions and practical work. 1½ points. Geikie's *The Teaching of Geography*, Tarr & McMurry's *North America*. Professor DODGE and Miss C. B. KIRCHWEY

M. and W. at 2.30 (first half-year only) and 30 hours' practical work.

This course will include a discussion of the principles underlying the grade school course in geography, and the division of the course in accordance with those conditions. A special study will be made of the teaching of North America.

Open to juniors and seniors who take or have taken Psychology **A** and Education **3**. Prerequisite: Geography **6**, or its equivalent.

**2** Geography of the land (physiography). Lectures, laboratory work and collateral reading.  $1\frac{1}{2}$  points. Professor DODGE and Miss C. B. KIRCHWEY

M. and W. at 1.30 and F., 1.30-3.30 (first half-year only).

Laboratory fee, \$1.

This course includes a study of the origin, development, classification and distribution of land forms, with a detailed treatment of the common types and their relation to life. Russell's *Rivers of North America* and Davis's *Physical Geography*.

Open to seniors and graduates. Prerequisite: A previous knowledge of elementary dynamic geology.

**3** Geography of the United States. Lectures, laboratory and library work.  $1\frac{1}{2}$  points. Professor DODGE and Miss C. B. KIRCHWEY

M. and W. at 1.30, and F., 1.30-3.30 (second half-year only).

Laboratory fee, \$1.

The course includes a detailed consideration of the several physical divisions of the United States, and a study of the social, economic and historical relations of man thereto.

Open to seniors and graduates. Prerequisite: Geography **2**, or its equivalent.

[**4** Geography of Europe. Lectures, laboratory and library work.  $1\frac{1}{2}$  points. Professor DODGE and Miss C. B. KIRCHWEY

Second half-year only.

This course includes a detailed consideration of the physical divisions of Europe, with a study of the social, economic and historical relations of man thereto.

Not given in 1901-1902.]

**6** General geography. Lectures, laboratory work and collateral reading. 2 points. Professor DODGE and Miss C. B. KIRCHWEY.

M. and W., 9.30-11.30.

Laboratory fee, \$2.

The following topics will indicate the general scope of the course: The shape, size and motion of the earth, and the effects thereof; the climate of the

world, as shown by temperature, pressure, prevailing winds, rainfall, etc.; the weather of the United States, involving a study of normal weather changes and their causes, the making of weather maps, etc.; vegetation zones as related to climate; the physical conditions of the oceans, as shown by deep-sea conditions, waves, tides and ocean currents. The effects of the topics discussed upon the conditions of human life over the world will be constantly brought out.

Mill's *Realm of Nature*; Ward's *Practical Exercises in Elementary Meteorology*.

Open to freshmen, sophomores and juniors. May be offered in collegiate course in partial fulfillment of the requirements in science.

**5** Political geography. Lectures and library work. Mill's *International Geography*.  $1\frac{1}{2}$  points. Professor DODGE and Miss C. B. KIRCHWEY

M., W. and F. at 2.30 (second half-year only).

This course will open with a consideration of the distribution of mankind, to be followed by a study of the effects of position, topography, climate, etc., upon the development of a nation and upon the interrelations of nations, as shown by internal progress, by success in colonization, etc. Ratzel's *Politische Geographie* and Wagner's *Lehrbuch der Geographie* will be used for collateral reading.

Open to seniors and graduates. Prerequisite: Geography **2** and **6**.

The following courses offered in other departments of the University are open to duly qualified students of Teachers College:

Economic geology, Geology of building-stones, Petrology, Invertebrate palæontology, Comparative geology, Palæobotany, Geological examinations and surveys, and General geology (2 courses).

A special circular of these courses will be sent on application to the Secretary of Columbia University.

### GERMAN LANGUAGE AND LITERATURE

**Education 17** Theory and practice of teaching German in secondary schools. Lectures, essays, discussions, reports of observation and practice-teaching. 2 points. Mr. BAGSTER-COLLINS

Tu. and Th. at 2.30 and 30 hours' practical work.

This course deals with the general principles underlying the teaching of living languages, with the special educational value of German, with methods and theories of teaching, and with the organization of German instruction in secondary schools.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure permission of the instructor and of the Dean. Required for the diploma in secondary teaching (German). Prerequisite: at least 9 points in German.

**A**—Elementary Course. 3 points. Mr. BAGSTER-COLLINS  
Teachers College Section.

M., W. and F. at 3.30.

Open to freshmen, sophomores and juniors. Required in the collegiate course of students who do not offer German for admission.

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The following courses offered in other departments of the University are open to duly qualified students in Teachers College:

History of German literature from the earliest times to the Nineteenth Century, Goethe's *Faust*, Practice in speaking and writing German, History of the German language from the rise of the middle dialects in the Middle High German period to the present day, Great German writers, Old High German, Middle High German, Geschichte der deutschen Litteratur im 19 Jahrhundert, mit besonderer Rücksicht auf das Drama, and General introduction to German philology.

### GREEK

**Education 18** Theory and practice of teaching Greek in secondary schools. Lectures, reports and practical work. 3 points. Professor LODGE

Tu., Th. and F. at 1.30 and 30 hours' practical work.

The course is divided as follows: (a) Systematic study of the Greek syntax as presented in the various text-books of this country and of Europe—one hour weekly; (b) critical study of Xenophon's *Anabasis*, and Homer's *Iliad*, from the point of view of subject-matter, language and style—one hour weekly; (c) study of the principles of Greek pronunciation and prosody, and other matters connected with the teaching of Greek, such as the selection and arrangement of materials in a course of study, and the like, supplemented by 30 hours' practical work in the Horace Mann School. The practical work may consist of observation of teaching, instruction of individuals or of groups of individuals, or regular teaching of larger classes—one hour, or its equivalent weekly.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (Greek). Prerequisite: at least 9 points in Greek.

Greek 35 I. Greek Syntax compared with the Latin.  
 II. The Hypotactic Sentence. 2 points. Professor LODGE  
 Tu. and Th. at 10.30.

The development of syntactical theory will be traced from the views of the Greek Philosophers and Grammarians, through the Latin Grammarians and the scholars of the Renaissance to the most recent discussions. Then the results of Comparative Philology and Historical Syntax will be employed to show, as far as possible, the fundamental conceptions at the basis of Mood and Tense usage in Greek and Latin, and an attempt will be made to organize and explain the syntactical phenomena of these two languages as they appear in the literary monuments.

Open to graduate students, and to others who secure the permission of the instructor.

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The following courses offered in other departments of the University are open to duly qualified students in Teachers College:

A special circular of these courses will be sent on application to the Secretary of Columbia University.

Elements of Greek archæology, Course in sight-reading; Euripides, *Iphigenia in Tauris*; Sophocles, *Philoctetes*; Plato, *Protагoras*; Aristophanes, *Clouds*; Rapid reading of Homer; Æschylus, *Agamemnon* and *Choephoroi*; Advanced Greek prose composition, Aristotle's *Constitution of Athens*, Selections from the Greek orators, lectures on Greek literature, with illustrative readings from Greek authors; Introduction to study of Greek archæology, sculpture, Lectures on manners and customs of the Ancient Greeks.

## HISTORY

Education 19 Theory and practice of teaching history in secondary schools. Lectures, discussions, observation and practice-teaching. 2 points. Professor CASTLE  
 Tu. and Th. at 9.30 and 45 hours' practical work.

This course includes the investigation of some historical topic to illustrate the teacher's preparation and organization of historic material; methods of presenting subject-matter to the classes; practical work, including observation, teaching and assistance; observation and reports upon work in history in other schools; a thesis upon some particular phase of historical teaching. The conference work will consist in working out a detailed course in mediæval history for high schools, including specific references in history and literature, illustrative material and bibliographies.

Open to seniors and graduates who take or have taken Education 1, 2 and 8,

and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (history). Prerequisite: at least 9 points in history.

**Education 20** Theory and practice of teaching history in elementary schools. Lectures, conferences, reference work and practical work.  $1\frac{1}{2}$  points. Professor CASTLE

M. and W. at 1.30 (second half-year only) and 30 hours' practical work.

The course includes lectures on the educational value of history, its place in the curriculum, and the methods of teaching it applicable to the different grades; observation and criticism of model lessons; preparation of lesson-plans and teaching; valuation of text-books and courses of study.

Open to juniors and seniors. Prerequisite: History 1 and 2.

**I Development of mediæval and modern civilization.** Recitations, lectures, conferences, essays and reference work. 3 points. Dr. HOWLAND

Two sections—(a) Tu. and Th. at 11.30 and S. at 9.30; (b) Tu. and Th. at 4.30 and S. at 10.30.

A study of the condition of the Roman Empire at the beginning of the 4th century; the organization and growth of the Church to the time of Constantine; the organization and civilization of the early Germans; the fusion of German and Roman; the rise of the Papacy and the restoration of the Roman Empire; feudalism; the relation of Church and State; the crusades and the rise of cities; the growth of nationalities; the Renaissance; the Reformation.

Open to freshmen, sophomores and juniors. Required in the collegiate course.

**2 History of the United States.** Recitations, lectures, conferences, essays and reference work. 3 points. Professor CASTLE

M., W. and F. at 11.30.

A study of the Colonies of Virginia, Massachusetts and New York, with a view to showing the transferal of English political and social institutions to this side of the Atlantic and their subsequent development in southern, northern and middle colonies; the struggle between France and England for control of the continent; the separation from England and formation of a federal government; the rise of parties and triumph of democratic ideas; the final separation of America from Europe through the war of 1812; the industrial revolution and westward expansion of the nation; the slavery controversy; the civil war and reconstruction of the nation; the political, social, economic and industrial problems of the nation at the present time.

Open to sophomores, juniors and seniors.

5 Economic and social history of the United States. Lectures, conferences, discussions, theses and practical work. 2 points. Dr. HOWLAND

Tu. and Th. at 1.30.

This course is intended primarily for students in the departments of Manual Training, Domestic Science and Domestic Art, and will deal with those special topics and phases of economic and social history which have direct and practical bearing upon the work of such students. It will give an idea of the nature and purpose of industrial growth, a consideration in detail of the various economic and industrial conditions and problems of the various sections of the United States at the present time, and the relation of economic and industrial forces to contemporary social conditions. In part, it will take up a study of the economic and industrial condition of Europe in the 16th and 17th centuries, as based upon the mercantile system; the outcome of these conditions in exploration and colonization; the growth of economic industry in the American colonies, culminating in the American Revolution; the industrial problem of the nation and the contemporary social condition and problems as an outgrowth of economic development.

Open to juniors and seniors.

7\* Greek and Roman history. Recitations, lectures, theses, conferences and reference work. 2 points.

Tu. and Th. at 3.30.

This course is intended for teachers in secondary schools, and presupposes such a knowledge of the subject of Greek and Roman history as is given in Oman's *History of Greece*; Botsford's *History of Greece*; Myer's *History of Greece for High Schools*; Allen's *History of Rome*; Mommsen's *History of Rome* (abridged); and Myer's *Rome, its Rise and Fall*. The course includes a brief study of each period or epoch to bring out its fundamental and characteristic facts, ideas and spirit; the sources and authorities from which these are derived, and the relative emphasis to be placed upon each period from an historic point of view; a consideration of the best illustrative material; and a comparative study of various texts.

Open to juniors and seniors. Prerequisite: History 2.

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The following courses offered in other departments of the University are open to duly qualified students in Teachers College:

Transition epochs in European history, History of Great Britain during the eighteenth and nineteenth centuries, Political and constitutional history of Rome, The sources of mediæval and modern European history, Methods of

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\* This course is announced tentatively pending the appointment of an instructor.

historical study, Mediæval institutions and culture, Constitutional history of England to 1689, Transitions in American history, Political and constitutional history of the United States and The United States during the civil war and reconstruction.

A special circular of these Courses will be sent on application to the Secretary of Columbia University.

### KINDERGARTEN

**Education 34** Kindergarten principles. Discussions, collateral reading and essays. 2 points. Professor RUNYAN

M. and W. at 2.30.

This course aims to give a comprehensive knowledge of the educational principles upon which the kindergarten system is based. A thorough study is made of Froebel's books, especially *The Education of Man*, with constant reference to other authorities in kindergarten and general educational theory.

Open to seniors and graduates. Required for the kindergarten diploma. Prerequisite: Kindergarten 1 and 2.

**Education 35** Kindergarten and primary teaching. Lectures, written reports and observation in the kindergarten.

2 points. Miss O'GRADY

Tu. and Th. at 11.30.

The purpose of this course is to give a general idea of the principles and methods of the kindergarten for the benefit of students preparing for other branches of educational work; then to examine the modifications of these methods, found useful in the elementary school, in summer schools and playgrounds, and in the various plans of social and industrial education, for undeveloped races and backward children; and finally, to assist students in working out original ideas on the same lines.

Open to seniors and graduates.

**Education 36** Kindergarten method and practice. (a) Lectures, discussions and preparation of lesson-plans. 2 points. Miss O'GRADY. M., W. and F. at 1.30. (b) Observation and practice in teaching. Hours and credit to be arranged. Professor RUNYAN, Miss O'GRADY and Miss BLAKE

This course aims to make practical application of the knowledge of principles gained in other courses. The kindergarten materials are considered both psychologically and practically, and plans for the yearly program are prepared and discussed. Finally the student's theoretical knowledge is tested and converted into power by daily experience under careful criticism in the kindergarten for a half-year.

Open to seniors and graduates. Required for the kindergarten diploma. Prerequisite: Kindergarten 1.

Graduate students in kindergarten may take (a) without (b).

**1** Gifts and occupations. (a) Gifts. Lectures, essays and discussions.  $1\frac{1}{2}$  points. Miss FRENCH. (b) Occupations. Practical work, discussions and collateral reading.  $1\frac{1}{2}$  points. Miss WILLARD

M., W. and F. at 1.30.

This course is intended to give technical mastery of the kindergarten materials, as well as an insight into their educational value and their place in Froebel's scheme. Froebel's *Gifts and Occupations* and other lines of hand work are studied.

Open to juniors and seniors. Required for the kindergarten diploma.

**2** Songs and games. (a) Lectures, discussions and essays. Professor RUNYAN. (b) Practical playing of games. 2 points. Miss FRENCH and Miss SUTHERLAND

M., W. and F. at 2.30.

This course aims to give an understanding of the meaning of the Froebel games, and through them a knowledge of Froebel's interpretation of child nature. It provides also practical work, giving familiarity with, and skill in using, the games and songs of the kindergarten. Froebel's *Mother-Play and Nursery Songs* is the chief text-book used.

Open to juniors and seniors. Required for the kindergarten diploma.

**3** Stories. Individual research, discussions, story-telling under criticism. 2 points. Professor RUNYAN

Tu. and Th. at 9.30.

This course gives a general survey of appropriate literature for little children, including folk and fairy tales, history stories, nature stories, fables and poems, and works out a classification of this literature for practical purposes.

Open to juniors and seniors. Required for the kindergarten diploma.

**8** Practicum. Lectures, conferences and original investigation of problems connected with kindergarten theory and practice. Professor RUNYAN, instructors and non-resident lecturers

Th. at 4.30.

Open to graduates and to practical kindergartners.

A special circular of this department will be sent on application to the Secretary.

### LATIN

**Education 21** Theory and practice of teaching Latin in secondary schools. Lectures, reports and practical work. 3 points. Professor LODGE

M., W. and F. at 1.30 and 30 hours' practical work.

The course is divided as follows: (a) Systematic study of the Latin syntax, as presented in the various text-books of this country and of Europe—one hour weekly; (b) critical study of Cæsar's *de bello Gallico*, and Vergil's *Æneid* from the point of view of subject-matter, language and style—one hour weekly; (c) study of the principles of Latin pronunciation, prosody and other matters connected with the teaching of Latin, such as the selection and arrangement of materials in a course of study, and the like, supplemented by 30 hours' practical work in the Horace Mann school. This practical work may consist of observation of teaching, instruction of individuals or of groups of pupils or regular teaching of large classes.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (Latin). Prerequisite: At least 9 points in Latin.

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The following courses offered in other departments of the University are open to duly qualified students in Teachers College:

Readings of selections in prose and verse illustrative of the public and private life of the Romans; Catullus and letters of Cicero; Juvenal, *Satires*, and Martial, *Epigrams*; Introduction to the Study of Roman inscriptions; Rapid reading, Horace and Ovid; Lectures on sources of Roman history, with readings from Peter's *Fragmenta Historicum Romanorum*, and from Livy; Lucretius, Books I.—III.; Latin prose composition, advanced course; Latin literature; Latin bibliography, and The topography and monuments of ancient Rome.

A special circular of these courses will be sent on application to the Secretary of Columbia University.

### MANUAL TRAINING

**Education 22** Theory and practice of teaching manual training. Discussions, collateral reading, observation and practice-teaching, and supplementary reading. 2 points. Professor RICHARDS

M. and W. at 11.30.

The topics considered in this course are as follows: Place of manual training in education; relation to child nature; problems of method; relation of hand

work to the curriculum ; possibilities as a medium of expression in the grades of the elementary school ; relation of manual training to out-of-school life ; various forms of hand work ; practical requirements ; problems of supervision ; direction and maintenance of work.

For students taking the course for secondary schools the following topics are included : Manual training in the high school ; courses of shopwork ; methods of presentation ; relation to industrial life.

Open to juniors and seniors who take or have taken Psychology **A** and Education **3**. Required for the diploma in manual training.

Prerequisite : Manual Training **1**.

**Education 32** Organization of manual training. Discussions, essays and research. 2 points. Professor RICHARDS  
Tu. and Th. at 1.30.

Opportunity will be afforded for selection for special study among the following topics : Organization of hand work for the elementary school, equipment for the elementary schools, costs and plans ; history and practice of manual training in the United States ; development and practice of manual training in Sweden, France, Germany and Russia ; manual training in the high school, organization of courses, study of methods and practice, relation to technical training, equipment, costs and plans ; manual training in reformatories ; trade schools, organization, courses and methods.

Open to students who take or have taken Education **22**, or its equivalent.

**I** Manual training for the primary grades. Practical work, observation and discussions. 3 points. Miss WEISER and Professor RICHARDS

Two sections: (a) M., W. and F., 1.30-3.30; (b) Tu. and Th., 1-30-3.30, and S., 9.30-10.30.

Laboratory fee, \$2.

This course deals with those forms of hand work that have been found most profitable in the lower grades of the elementary school, before a separate laboratory is commonly available for such work, and aims to afford a comprehensive study of this field as related to the needs both of the special teacher and the regular grade teacher. Processes and projects are considered chiefly in their relation to the school curriculum. The expression possibilities of each medium are studied and methods of teaching discussed. The lines of work studied include clay modeling, elements of sewing and weaving, cord work, raffia and reed basketry, paper and cardboard work, bent-iron work and simple wood work.

Open to juniors and seniors. Required of candidates for the diplomas in domestic art, and in manual training for elementary schools.

**2** Wood working for elementary schools. Shop work, ob-

servation and discussion of methods. 4 points. Mr. EKLÖF and Professor RICHARDS

M., W. and F., 9.30-11.30; conference, Th. at 11.30.

Laboratory fee, \$2.

In this course a varied equipment of bench tools is employed, and a typical set of models adapted to the interests and capacities of boys in the upper grades of the elementary school is studied and executed. A study is made of each type or model from the standpoint of its relation to school, home or industrial life, and adjustment to the capacities of the worker. Each model is considered as an opportunity for self-expression on the part of the pupil, and methods of presentation and execution are discussed.

Open to juniors and seniors. Required of candidates for the diploma in manual training for elementary schools.

**3** Wood working for secondary schools. Shopwork. 5 points. Mr. EKLÖF

M., W., Th. and F., 9.30-11.30.

Laboratory fee, \$2.

In this course a very complete set of bench tools is employed and a wide range of operations is covered. The models, as in the course for elementary schools, aim at direct relation either to school, home or industrial life.

Open to juniors and seniors. Required for the diploma in manual training for secondary schools. Prerequisite : Manual Training **2**, or its equivalent.

**4** Turning and pattern-making. Shopwork. 4 points. Mr. WEICK

M., W. and Th., 9.30-11.30.

Laboratory fee, \$2.

The course deals with various methods of turning in soft and hard woods. The work in pattern-making deals with technical methods and constructions, and relates directly to the course in moulding.

Open to juniors and seniors who take Manual Training **5**. Required for the diploma in manual training for secondary schools, unless Manual Training **6** or **7** be taken.

**5** Moulding and foundry practice. Shopwork. 2 points.

Mr. WEICK

Tu. and F., 10.30-12.30.

Laboratory fee, \$2.

This course deals, first, with the bench moulding of small patterns, and afterwards with the operations of dry sand, loam and swept work.

Open to juniors and seniors who take Manual Training **4**. Required for the diploma in manual training in secondary schools, unless Manual Training **6** or **7** be taken.

**6 Forging and sheet-metal work.** Shopwork. 6 points.  
Mr. SLEFFEL

M., Tu., W., Th. and F., 9.30-11.30.

Laboratory fee, \$2.

In this course the field of hand forging as related to the possibilities of high school work is covered. The exercises take the form of examples of practical construction, tools and projects to which decorative treatment is applied.

Open to juniors and seniors. Required for the diploma in manual training for secondary schools, unless Manual Training 4 and 5, or 7, be taken. Prerequisite: at least one year's systematic work in forging.

**7 Machine shop work.** Shopwork. 6 points. Mr. BENNS  
M., Tu., W., Th. and F., 9.30-11.30.

Laboratory fee, \$2.

This is a course in filing and fitting, followed by a comprehensive training upon the various tools of the thoroughly equipped machine-shop.

Open to juniors and seniors. Required for the diploma in manual training for secondary schools, unless Manual Training 4 and 5, or 6, be taken. Prerequisite: at least one year's systematic work in machine practice.

**8 Mechanical drawing.** 2 points. Mr. ROUILLION

Tu. and Th., 3.30-5.30.

This course serves as an introduction to the subject. It is devoted chiefly to the principles and practice of the working drawing, and aims to present a course suitable for the elementary school.

Open to juniors and seniors. Required for the diplomas in fine arts and manual training.

**9 Mechanical drawing.** 2 points. Mr. ROUILLION

W. and F., 2.30-4.30.

An advanced course, involving analytical drawing and practical drafting considered with special reference to the needs of high school work.

Open to seniors. Required of candidates for the manual training diploma for secondary schools. Prerequisite: Manual Training 8.

Certain courses in this department are arranged for students in the School of Engineering. These courses aim to afford a comprehensive study of tools, materials and methods involved in engineering processes, considered from the economic as well as from the technical standpoint. They are outlined in the catalogue of the School of Engineering, being entitled Mechanical Engineering 3, 4, 5, etc.

A special circular of this department will be sent on application to the Secretary.

**MATHEMATICS**

**Education 23** Theory and practice of teaching mathematics in secondary schools. Lectures, discussions and practical work. 3 points.

Tu. and Th. at 2.30 and 30 hours' practical work.

The course includes a review of arithmetic, algebra, geometry and trigonometry, with special reference to the needs of secondary schools, and a study of the following topics: the relations of mathematics to other subjects of the curriculum; practical applications within the scope of the secondary school; study of the literature of the subject; observation; practice in preparing and teaching series of typical lessons.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (mathematics). Prerequisite: at least 9 points in mathematics.

**Education 24** Theory and practice of teaching mathematics in elementary schools. Conferences, observation and discussions. 1½ points.

M. and W. at 2.30 (second half-year only) and 30 hours' practical work.

The course includes lectures upon arithmetic, algebra and geometry, their relations to one another and to other subjects of the curriculum, particularly to science and manual training. It also offers training in the preparation of lessons, observation and practice-teaching.

Open to juniors and seniors who take or have taken Psychology A and Education 3. Prerequisite: Mathematics A, or its equivalent.

**A—Geometry, algebra and trigonometry.** Volumetric and spherical geometry, algebra, including the arithmetical and geometrical progressions, undetermined coefficients and the elementary principles of logarithms; trigonometry, including the use of tables of logarithms and the solution of plane triangles. 3 points.

Teachers College Section.

Tu. and Th. at 1.30 and S. at 11.30.

Open to freshmen, sophomores and juniors. Required of students in collegiate course who do not offer advanced mathematics for admission.

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The following courses offered in other departments of the University are open to duly qualified students in Teachers College:

Geometry, Algebra and Trigonometry, Trigonometry, Advanced algebra, Analytical geometry, Calculus, Differential equations, Theory of equations and Modern methods in analytic geometry, Solid analytic geometry.

A special circular of these courses will be sent on application to the Secretary of Columbia University.

## MUSIC

**Education 43** Theory and practice of teaching music. Lectures and practical work. 2 points. Professor FARNSWORTH

Tu. and Th. at 4.30 and 30 hours' practical work.

This course includes a consideration of the peculiar difficulties that arise in the teaching of music; the history and present position of music in the schools; the choice and use of methods and teaching materials; the observation of teaching, and the preparation and giving of lessons.

Open to seniors who take or have taken Music 1. Required for the diploma in music. Prerequisite: Psychology A, Education 3 and Music 2.

**1** Sight singing—elementary course. 2 points. Professor FARNSWORTH

M. and F. at 3.30; chorus M. at 4.30.

This course gives practice for teaching music in the kindergarten and the lower grammar grades. It requires first, the perception of musical thought from its visual expression. This necessitates awakening and defining of the tonal relationships of music and associating them with their visual expressions; second, the vocal expression of musical thought with reference to breath control, resonance and articulation.

Open to freshmen, sophomores and juniors. Required for the diploma in music.

**2** Sight singing—advanced course. 2 points. Professor FARNSWORTH

Tu. and Th. at 1.30; chorus M. at 4.30.

This course is a continuation of Music 1, and gives practice in music for the upper grammar grades and the first two years of secondary schools. The more complex tonal relationships are defined and practice is given in their expression and in the reading of difficult chorus works.

Open to sophomores, juniors and seniors. Required for the diploma in music.

**3** Musical art. 1 point. Professor FARNSWORTH  
F. at 2.30.

This course presents advanced elective work in music for high schools. It

complements the work in sight singing, giving the artistic significance of the subject. First, largely by means of lantern slides, some of the simpler laws of art are considered, showing not only the relationship of music to the other fine arts, but also giving some idea of what is meant by the term "art." Second, the form and style of characteristic works are studied, the student becoming acquainted with composition and learning something as to its origin, both as to period and composer.

Open to juniors and seniors. Required for the diploma in music. Prerequisite: Music 1, or its equivalent.

**4\*** Voice culture. 2 points.

M. and W. at 10.30.

**5\*** Voice culture. 2 points.

M. and W. at 11.30.

An announcement of these courses will be made later.

**1c†**—General musical course. Lectures and private reading, with illustrations. 1 point. S. at 9.30. Professor MACDOWELL

This course, while outlining the purely technical side of music, aims at giving a general idea of it from its historical and æsthetic side. The course treats of the beginnings of music, the Greek modes and their evolution, systems of notation, the Troubadours and Minnesingers, beginnings of opera, the clavé-cinists, beginnings of programme music, beginnings of the modern orchestra, evolution of forms, the symphony and opera up to Beethoven. Analysis. This course, as **2c**, is fully illustrated. No previous knowledge of music is required for admission to Course 1.

Open to properly qualified students. Required in first year of candidates for the diploma in music.

**2c**—General musical course. Lectures and private reading, with illustrations. 1 point. W. at 1.30. Professor MACDOWELL

This course, which is a continuation of Course 1, treats of the development of forms, the song, romanticism, instrumental development and the composers for piano-forte, the virtuoso, modern orchestration and symphonic forms, the music drama, impressionism versus absolute music, and color versus form, the relationship of music to the other arts, musical criticism.

Courses 1 and 2 are fully illustrated. The orchestral instruments are explained and their technique practically demonstrated.

Open to properly qualified students. Required in second year of candidates for the diploma in music. Prerequisite: Music 1c.

\* These courses, intended primarily for supervisors of music and specialists in music, are announced tentatively pending the appointment of an instructor.

† Courses marked c are given in the Department of Music of Columbia College.

**3c**—Harmony. 2 points. W. at 3.30; S. at 11.30. Mr. MCWHOOD

This course treats of general theory, harmony, chords and their mutual significance, altered chords, suspensions, modulation and analysis.

Open to properly qualified students. Required in first year of candidates for the diploma in music. Prerequisite: A knowledge of notation.

**7c** Seminar. 1 point. W. at 3.30. Professor MACDOWELL

This course treats of free harmony and the practical composition of music; it may be considered as a continuation of Course 3.

Open to properly qualified students. Required in second year of candidates for the diploma in music. Prerequisite: Music 3c, or its equivalent.

A special circular of this department will be sent on application to the Secretary.

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The following courses, offered in other departments of the University, are open to duly qualified students in Teachers College:

Counterpoint, Free composition, University chorus, University orchestra.

A special circular of these Courses will be sent on application to the Secretary of Columbia University.

## **PHILOSOPHY, PSYCHOLOGY, AND ANTHROPOLOGY**

### **Philosophy and Ethics**

#### *Courses in Columbia*

**1** Historical and critical introduction to philosophy. Lectures, essays and private reading. 3 points. Professor BUTLER, assisted by Dr. JONES

M., W. and F. at 2.30, Room 422, Columbia Library.

This course embraces both a general survey of systematic thought from the rise of Greek philosophy to the present time, with particular reference to the development of the conceptions and problems of philosophy, and the critical study of the fundamental questions of contemporary thought. Especial stress is laid upon the relations between philosophy and the development of civilization, as shown in the institutions, art and literature of various nations and periods. This course serves as a general introduction to the study of philosophy, and is prerequisite to Courses 3, 6, 11, 12, 13 and 14. The books used are Weber's *History of Philosophy*, Windelband's *History of Philosophy*, Paulsen's *Introduction to Philosophy*.

**2** Ethics, introductory course. Lectures, essays and discussions. 3 points.

M., W. and F. at 11.30, second half-year. Room 410, Columbia Library.

This course aims to give a careful and systematic analysis of elementary conceptions in ethics, with an examination of the fundamental doctrines of this branch of philosophy. It deals largely with theoretical problems, but devotes a portion of the time to practical questions. The principal subjects treated are conscience, its nature, origin and authority, with particular reference to the doctrine of evolution; motives; the will, and its freedom; utilitarianism, and its opposing theories; the doctrine of rights; and the duties of the individual, the family and the state. Hyslop's *Elements of Ethics* is used.

**3** The Philosophy of Kant and his successors. Lectures, discussions and reports. 2 points. Professor BUTLER

Tu. and Th. at 2.30, Room 415, Columbia Library.

**5** Practical ethics—Lectures, private reading, observation, essays and discussions. 3 points. Professor HYSLOP

M., W. and F. at 3.30, Room 417, Library.

This course opens with a study of casuistry and the general problems of practical ethics in their relation to the theory of morality. After this, special practical questions are taken up in the form of reading, lectures and discussions, special emphasis being laid upon the individual side of the problems involved. The topics for study include: suicide; poverty and its causes; charity, its history, object and methods; ethical aspects of labor problems, methods of punishment, prison discipline and reform, the family, marriage and divorce, property, individual rights, intemperance and methods of treatment, civic duties, etc.

**8** Principles and problems of æsthetics. Lectures, discussions and private reading. 2 points. Dr. JONES

M. and W. at 11.30, Room 417, Columbia Library.

In this course the problems of æsthetics will be considered in their philosophical, psychological and sociological aspects. Among the works referred to are those by Hegel, Schopenhauer, Spencer, Allen, Guyau, Santayana and Grosse.

Students who take two hours of laboratory work in connection with this course may count it as a 3-point course.

**9** Logic and scientific method. Recitations, practical exercises and discussions. 1½ points. Second half-year.

M., W. and F. at 1.30, Room 418, Columbia Library.

One of the three hours will be spent in the critical examination of a special author, whose statements, opinions and inferences will be analyzed and tested by the principles of logic. Two hours will be given to lectures and discussions, which will be based upon Creighton's *Introductory Logic*.

**12** Philosophical practicum on selected topics in modern philosophy, principally taken from the writings of Hegel and of Herbart. 2 points. Professor BUTLER

Tu. and Th. at 2.30, Room 415, Columbia Library.

This course consists of the reading and discussion of selected portions of the writings of Hegel and of Herbart, with reference particularly to topics which are fundamental both in philosophy and in the theory of education. The course is designed to meet the needs of advanced students of educational theory, as well as those of advanced students of philosophy.

Courses 1 and 2 are intended primarily for undergraduates; all the other courses primarily for advanced students. All the courses noted are open to women on the same terms as to men. Full details as to these courses and information as to other courses are given in the Announcement of the Faculty of Philosophy, which will be sent on application to the Secretary.

## Psychology

### *Courses in Columbia*

**A** Elements of psychology. Lectures, practical exercises and recitations. 1½ points. Professor THORNDIKE

Teachers College Section. Three sections (first half-year only)—M., W. and F., (a) 9.30, open to candidates for diplomas in elementary and kindergarten teaching; (b) 11.30, open to candidates for diplomas in domestic art, domestic science, fine arts, music and manual training; (c) 3.30, open to collegiate students and others by permission of the instructor.

Required for all diplomas.

For divisions for Columbia and Barnard students, see announcements for Columbia and Barnard.

**I** Introduction to psychology. Lectures and demonstrations. 2 points. Professors BUTLER, CATTELL, BOAS, STARR, HYSLOP, THORNDIKE, Dr. FARRAND and Mr. STRONG

Tu. and Th. at 11.30, Psychological Laboratory.

The object of this course is to give a summary view of the subject-matter and methods of modern psychology. The ground covered is as follows:

*A* Prolegomena to psychology. Six lectures. Professor BUTLER

*B* Physiological psychology. Eight lectures. Dr. FARRAND

*C* Experimental psychology. Eight lectures. Professor CATTELL

*D* Genetic psychology. Seven lectures. Professor THORNDIKE

*E* Racial and individual psychology. Seven lectures. Professor BOAS

*F* Pathological psychology. Three lectures. Dr. STARR

*G* General psychology. Eight lectures. Professor HYSLOP

*H* Philosophy of mind. Six lectures. Mr. STRONG

Open to students who take or have taken Psychology A.

**2** Experimental psychology, introductory course. Lectures, themes and experiments. 2 points. Professor CATTELL

Tu. and Th. at 10.30, Psychological Laboratory.

This course is introductory to the more advanced courses in psychology, and is intended to give such knowledge of modern psychological methods and results as should be included in a liberal education. The senses are studied during the first half-year with regard to the interrelations of physics, physiology and psychology. In the second half-year the higher mental processes are reviewed in so far as this can be done by experimental methods.

Course 3 should, when possible, be taken in conjunction with this course.

**3** Experimental psychology, laboratory work. 1 or 2 points. Professor CATTELL, assisted by Mr. DAVIS

Tu. and Th. at 9.30 and 2.30-4.30, Psychological Laboratory.

This course is intended to give students attending Course 2 opportunities for laboratory work. A series of experiments and measurements is made by the student covering the chief topics and methods of experimental psychology.

**4** Problems in experimental psychology. Lectures, laboratory work, and reports. 2 points. Professor CATTELL

Tu. and Th. at 12.30, Psychological Laboratory.

The subject of this course is altered each year, so that candidates for the higher degrees may be able to investigate different subjects. Students are expected to carry out experiments, verifying researches made by others, and undertaking original research, and to report on these and on the literature of the subject.

**5** Research work in experimental psychology. Professor CATTELL, assisted by Mr. WISSLER

Daily, Psychological Laboratory.

Students looking forward to the degree of doctor of philosophy, and scientific men, are given in this course opportunity for psychological research in any direction. The laboratory has been specially arranged and the apparatus secured for such research, and any additional or new apparatus required for special investigation will be at once secured.

**11** Genetic psychology, advanced course. Teachers College course. 2 points. Professor THORNDIKE

Th., 1.30-3.30, Teachers College.

**13** Genetic and comparative psychology. Research work.

Teachers College course. 2 or more points. Professor THORNDIKE

Hours to be arranged.

In this course an opportunity is afforded for original studies of mental development in the race and in the individual, and for the scientific investigation of those topics in educational theory and practice which lend themselves to treatment by the methods of psychological research.

Open to graduates with permission of the instructor.

**6** Analytic psychology, advanced course. Lectures, discussions and private reading. 2 points. Mr. STRONG

W. and F. at 10.30, Psychological Laboratory.

This course, intended for advanced students, discusses the principal questions of psychological theory from the standpoint of introspective analysis, but with due attention to physiological and pathological facts. Passages from James's *Principles of Psychology* and Stout's *Analytic Psychology* are expounded and criticised. The subjects treated include methods of explanation in psychology; the traditional division into knowledge, feelings and will; the psychology of space and time; the nature of attention, belief, emotion, will, etc.

Students are advised to take Psychology I and one course in the history of philosophy before electing this course.

**15** Philosophy of mind. Lectures, discussions and private reading. 2 points. Mr. STRONG

Tu. and Th. at 10.30, Psychological Laboratory.

This course treats of the philosophical problems growing out of psychology, viz., the general nature of consciousness, its relation to the body, its origin and place in the world. The views of the great philosophers and of contemporary writers, such as Bradley, Hodgson, Ward, James and Royce, are reported and discussed. In connection with the relation of mind and body it is found necessary to consider the problem of the external world, and the course thus forms an introduction to philosophy suitable for students of psychology.

**14** Research work in analytic psychology and the philosophy of mind. Consultations. Mr. STRONG

Hours to be arranged. Psychological Laboratory.

**7** Diseases of the mind and nervous system. Lectures and demonstrations. 1 point. Professor STARR

Th., 4-5, College of Physicians and Surgeons.

**8** Physiological psychology, general course. Lectures, demonstrations and laboratory work. 3 points. Dr. FARRAND

M., W. and F. at 10.30, Psychological Laboratory.

This course consists of lectures, demonstrations and laboratory work on the

anatomy and physiology of the central nervous system. A brief general discussion of its development through lower forms to the higher will be followed by a more thorough study of the anatomy of the human central nervous system, this in turn leading up to its physiology.

**9** Abnormal and pathological psychology. Lectures and discussions. 1 point. Dr. FARRAND

F. at 12.30, Psychological Laboratory.

This course treats of insanity, idiocy and imbecility, illusions and hallucinations, hypnotism, obscure mental phenomena and related topics.

**12** Research work in physiological and abnormal psychology. Consultations. Dr. FARRAND

Hours to be arranged. Psychological Laboratory.

These courses cover the field of modern psychology, from its elements to the most specialized university work. Psychology **A** is prerequisite to the other courses, except that Course **1** or **8** may with advantage be taken in the same year. Psychology **2** and **3** are introductory courses, which may be elected in the last year of undergraduate or the first year of graduate work. The other courses are for advanced students. All the courses are open to qualified students, both men and women, except that Course **7** is open to men only.

Further information in regard to the courses in psychology will be found in the Announcement issued by the Division of Philosophy and Psychology, which may be obtained on application to the Assistant Secretary of Columbia University.

## Anthropology

### *Courses in Columbia*

**1** General introductory course. Lectures, essays and discussions. 1 point. First half-year: Physical anthropology and linguistics. Professor BOAS. Second half-year: Ethnology. Dr. FARRAND

Tu. and Th. at 1.30, Psychological Laboratory.

In the first half of this course a description of human races and of their distribution is given. The physical characters of the earliest human remains and their relations to present forms are discussed, and types of languages and their geographical distribution are described. In the second half the mental development of primitive man is discussed, which is followed by a description of types of primitive culture and an inquiry into the origin and development of particular phases of culture.

**2** The statistical study of variation, introductory course. Lectures, essays and discussions. 2 points. Professor BOAS

Tu. and Th. at 9.30, Psychological Laboratory.

This course is intended as an introduction to the study of variation for students of anthropology, biology and psychology. The characteristic features of variability and the methods of treatment are discussed. Practical work on anthropological, biological and psychological material supplements the lectures.

**3 Ethnology, primitive culture.** Lectures, papers and discussions. 2 points. Dr. FARRAND

M. and W. at 12.30, Psychological Laboratory.

This course consists of a more detailed treatment of the questions involved in primitive culture, such as the origin and development of mythology, morality and religion, education, art, social customs, etc. Students are expected to have taken Anthropology 1, or to give satisfactory evidence of previous work, before being admitted to this course.

**4 Physical anthropology.** Lectures and laboratory work. 1 point. Professor BOAS

W., 9.30-11.30, American Museum of Natural History.

Lectures and demonstrations in physical anthropology, including characteristics of the races of man, influences of social conditions upon anatomical features, growth, etc. The collections and instruments belonging to the Anthropological Department of the American Museum of Natural History will be accessible to students in this course. Course 2, or its equivalent, is prerequisite.

**6 North American languages.** Lectures and discussions. 2 points. Professor BOAS

Tu., 10.30-12.30, Psychological Laboratory.

Selected languages representing different types will be discussed. Indian myths will be translated in connection with grammatical interpretation. The course extends over two years, allowing time for the consideration of representative types of North American languages.

**Anthropology 8** Research work in physical anthropology, ethnology and American languages. Professor BOAS and Dr. FARRAND

Hours to be arranged.

Courses 1 and 2 are introductory and may be elected in the last year of undergraduate or in the first year of graduate work. The other courses are for advanced students. The courses are open to qualified students, both men and women, except that Course 3 is open to men only.

Full details as to these courses and information as to other courses will be found in the Announcements of the Division of Philosophy and Psychology, which will be sent on application to the Secretary of Columbia University.

**PHYSICAL SCIENCE**

**Education 25.** Theory and practice of teaching physical science in secondary schools. First half-year, chemistry; second half-year, physics. Laboratory exercises, observation and practical work. 2 points. Professor WOODHULL

F., 1.30-3.30 and 30 hours' practical work.

Laboratory fee, \$2.

This course covers the selection, arrangement and treatment of subject-matter suitable for secondary schools, and a study of equipment and management of laboratories.

Open to seniors and graduates who take or have taken Education 1, 2 and 8, and to candidates for higher degrees who secure the permission of the instructor and of the Dean. Required for the diploma in secondary teaching (physical science). Prerequisite: at least 9 hours in physics and chemistry.

**1** General chemistry. 2 points. Professor WOODHULL and Miss VAN ARSDALE

M. and Th., 9.30-11.30.

Laboratory fee, \$5.

This is a brief course in chemistry adapted to those who need the first principles of the subject. Text-books: Remsen's *Briefer Course*, and Woodhull and Van Arsdale's *Laboratory Manual*.

Open to freshmen, sophomores and juniors. May be offered in the collegiate course in partial fulfillment of the requirements in science.

**2** General physics. 2 points. Professor WOODHULL and Miss VAN ARSDALE

M. and Th., 1.30-3.30.

Laboratory fee, \$2.

Open to freshmen, sophomores and juniors. May be offered in the collegiate course in partial fulfillment of the requirements in science. Text-books: Henderson and Woodhull's *Physics*, and Woodhull and Van Arsdale's *Laboratory Manual*.

**4** The history of physical science. Lectures, essays and collateral reading. 1 point. Professor WOODHULL

W. at 11.30.

Open to properly qualified students. Prerequisite: Physical Science, 1 and 2, or their equivalents. Candidates for diploma in secondary teaching (physical science) are recommended to elect this course.

**5 General Astronomy.** Lectures and practical work. 1 point. Professor WOODHULL  
S. at 10.30.

Open to freshmen, sophomores and juniors. Text-book: Todd's *New Astronomy*.

The following courses, offered in other departments of the University, are open to duly qualified students in Teachers College:

General physics, Magnetism, electricity and sound, Light and heat, General inorganic chemistry, Qualitative analysis, Organic chemistry.

A special circular of these Courses will be sent on application to the Secretary of Columbia University.

#### PHYSICAL TRAINING

**1 Gymnastics.** 1 point. Mrs. LAWRENCE, Miss SEWARD and Mr. JARDINE

Tu. and Th. at 2.30.

This course involves work with various apparatus and includes fancy marches, games and basket ball. Informal talks are given from time to time on anatomy, healthful dress, and hygiene, fully illustrated by the human skeleton charts, wearing apparel and other appliances.

Open to women only.

**2 Gymnastics.** Continuation of Course 1. 1 point. Mrs. LAWRENCE, Miss SEWARD and Mr. JARDINE

Tu. and Th. at 3.30.

Open to women only.

**3 Swedish gymnastics.** 1 point. Mrs. LAWRENCE  
Hour to be arranged.

In this course attention is given to exercise and drill in the Swedish system, and to methods of teaching gymnastics in elementary schools.

The aim of this department is to insure health for students while undergoing their college course, to give them ease and grace in movement, and to teach them the importance of physical development as a part of a complete education. All students who do not present a physician's certificate on entrance will be required before beginning their work in this department to undergo a physical examination by one of the college physicians. Women in all classes are required to have the gymnastic suits adopted by the College. These suits cost \$5 each.

## COURSES OF STUDY

Teachers College offers the following courses of study:

**1** A graduate course leading to the Higher Diploma for research and investigation in any field of education, and for the highest professional training of teachers in colleges and normal schools, and of superintendents, principals and supervisors of public schools.

**2** A graduate course leading to the Secondary Diploma for teachers of subjects commonly taught in colleges and secondary schools.

**3** A two-year professional course leading to the Elementary Diploma for supervisors and general teachers in elementary schools.

**4** A two-year professional course leading to the Kindergarten Diploma for directors and teachers in kindergartens.

**5** A two-year professional course leading to the Domestic Art Diploma, for supervisors and teachers of domestic art in elementary and secondary schools.

**6** A two-year professional course leading to the Domestic Science Diploma, for supervisors and teachers of domestic science in elementary and secondary schools.

**7** A two-year professional course leading to the Fine Arts Diploma, for supervisors and teachers of fine arts in elementary and secondary schools.

**8** A two-year professional course leading to the Manual Training Diploma, for supervisors and teachers of manual training in elementary and secondary schools.

**9** A two-year professional course leading to the Music Diploma, for supervisors and teachers of music in elementary and secondary schools.

**10** A two-year Collegiate course introductory to the two-year professional course as given above.

**11** Special courses for qualified students who are not candidates for a diploma.

**GENERAL REGULATIONS**

**1** Collegiate students and students who are candidates for a diploma are registered as regular students; students not candidates for a diploma are registered as special students; teachers in the schools of New York and vicinity who are pursuing extension courses are listed as extension students; certain courses may be taken by auditors without becoming matriculated students.

**2** No student is permitted to register in one year for courses amounting to a credit of more than eighteen points; in this reckoning two hours of observation or laboratory or shop work count as one.

**3** The Dean and the head of the department concerned may, for reasons of weight, permit any study prescribed for a diploma to be taken out of its regular sequence in the course.

**4** Elective courses are offered subject to withdrawal if elected by fewer than three matriculated students.

**5** A minimum credit of thirty points, including prescribed subjects, is required for graduation in a two-year course. Students may be given advanced standing on admission, but all candidates for diplomas must spend at least one year in residence.

**6** In all two-year courses a total credit of twelve points is considered an essential prerequisite to promotion to the second-year class.

**7** All students in the Collegiate course are required to take systematic physical exercise in the gymnasium, to the extent of two hours weekly, unless excused for cause. Men will be assigned to the Columbia Gymnasium; women to the gymnasium of Teachers College.

**GRADUATE COURSE LEADING TO THE HIGHER  
DIPLOMA**

**1** Candidates for the higher diploma of Teachers College must be (*a*) graduates of an approved institution of learning, —a college, engineering school, normal school, or the equivalent of one of these, and (*b*) must present satisfactory evi-

dence of a high degree of professional ability as a result of the study of education or experience in teaching.

2 Candidates for the higher diploma must pursue their studies in residence for a minimum period of one year, after having satisfactorily completed Education 1, 2 and 4\* in Teachers College, or substantially equivalent courses in an approved college or university. The demands of a year of residence will not be fulfilled until the candidate has received credit of at least eight points in advanced courses. Candidates may divide their year of residence, taking as few complete courses each year as they desire, and the time required to complete the course will depend in each case upon the student's ability to do the work that may be assigned.

3 Each candidate is required to make Education his major subject,† and not later than October 15th of the academic year in which the oral examination takes place (see paragraph 5) to designate two minor subjects. A student may select a minor in any department of the College with the approval of the professor concerned, and in any other department of the University with the approval of the Dean concerned. It is expected that fully half of the student's time will be given to this major subject. The character of the work will be determined by the professors in charge of the subject selected.

4 Each candidate shall present an essay on some educational topic, written under the direct supervision of the professor in charge of his major subject. The topic must be approved by that professor before December 1st in the year in which it is chosen. Its treatment must give evidence of original investigation, and the candidate must state in writing wherein it shows originality. The essay must be pre-

\* An examination in these courses will be held annually at the opening of the first half-year in order that new students may have an opportunity of meeting the requirement and proving their fitness for advanced work in Education. The Dean is authorized to modify this requirement for reasons of weight, and in exceptional cases to permit candidates for the higher diploma to count Education 1, 2 or 4 towards a minor subject.

† A candidate for the higher diploma and a University degree need not necessarily offer the same major subject in both courses.

ceded by a detailed outline presenting a summary of the thesis discussed. It must be typewritten on firm, strong paper, 11 x 8½ inches; a space of 1½ inches on the inner margin must be left free from writing. It must be in such form as to be ready for immediate printing. On the cover page and on the title-page should be the words "Submitted in partial fulfillment of the requirements for the Higher Diploma of Teachers College." Two typewritten (or printed) copies must be filed with the Secretary of the College on or before April 15th of the year in which the student makes application for examination thereon. When approved by the professor in charge, these copies will be filed with the Librarian of Teachers College.

5 Each candidate, in addition to passing such examination in course as may be required in order to secure the necessary credit of attendance, shall be subjected to an oral examination on his major and minor subjects and on his thesis in the presence of the Faculty of Teachers College, or so many of its members as may desire to attend.

6 The professor in charge of the candidate's major subject must formally approve of his essay and testify to his professional ability before the candidate may be examined. Credit for at least eight points of advanced work in the courses approved for the major and minor subjects is also a necessary prerequisite to admission to examination.

7 Application for examination must be made on the blank form provided for that purpose, and must be filed with the Secretary of the College before May 1st of the year in which the examination is desired.

#### GRADUATE COURSE LEADING TO THE SECONDARY DIPLOMA

I Candidates for a diploma in English, French, German, Greek, Latin, history, mathematics, biology, geography and geology, or physical science, must spend at least one year in residence at Teachers College. The diploma will be conferred only on such candidates as have a liberal education, special knowledge of the subjects in which the diploma is

sought, an understanding of the science of education, and the ability to give instruction in a satisfactory manner.

2 Candidates for admission to this course must hold a bachelor's degree, or its equivalent from a European institution—except that a senior in good standing in Columbia College or Barnard College may elect the subjects of this course, and thus secure a diploma for secondary teaching at the same time that the degree of A.B. is received. In like manner qualified students in Teachers College may secure this diploma and the degree of B.S. at the same time.

3 A total credit of nine points (*i. e.*, the equivalent of three hours per week during three years) in each subject in which a diploma is sought is an essential prerequisite for admission to the course. The Dean is authorized to require so much additional credit in subject-matter as he may deem necessary.

4 Candidates for this diploma are required to take Education 1, 2 and 8, and also the course in the theory and practice of teaching appropriate to each subject in which the diploma is sought.

5 All candidates are required to demonstrate their proficiency in each subject in which the diploma is sought (1) in the preparation of an essay or report on some professional topic of the course, and (2) by evidence of ability to teach. Properly qualified students will be given the privilege of teaching in the Horace Mann School when in the judgment of the Principal it can be done without injury to the pupils. Students who need long practice in teaching under guidance have exceptional opportunities in the Experimental School.

#### **TWO-YEAR COURSE LEADING TO THE ELEMENTARY DIPLOMA**

1 Candidates for admission to this course must (*a*) be graduates of an approved normal school or teachers' training-school, or (*b*) give evidence of having completed the sophomore year in an approved college, or institution of equal academic rank. Graduates of approved secondary schools may meet these requirements by the satisfactory completion

of the Collegiate course in Teachers College, or of the first two years of the course in Columbia College or Barnard College.

**2** Students admitted to this course are required to take Psychology **A**, Education **1, 2, 3, 4** and **9**, and to elect other courses amounting in all to thirty points for the two years of residence. The course of study in each year must be approved by the standing committee of the Faculty.

**3** Candidates for the Elementary Diploma may elect to specialize either in the primary or grammar grades. This decision must be made not later than the beginning of the second year of the course, and will determine in part the choice of elective studies during the remainder of the course. For example, primary teachers and supervisors are advised to elect Education **10** and **35**, Biology **5**, English **3**, Fine Arts **8** and **14**, Manual Training **1**, Music **1** and **2**, and courses of a similar character.

**4** Students who hold a degree from an approved college may be admitted to the second year of the course in elementary teaching. Such students are required to take Education **1, 2** and **3**, two courses in the theory and practice of teaching in elementary schools (see page 36), and other elective courses, amounting in all to fifteen points for the year of residence. Students of Columbia College and of Barnard College may, under the general regulations of the University Council, elect these required subjects during the last two years of the undergraduate course.

#### TWO-YEAR COURSE LEADING TO THE KINDERGARTEN DIPLOMA

**1** Candidates for admission to this course must (1) be graduates of an approved normal school or kindergarten training-school, or (2) give evidence of having completed the sophomore year in an approved college or institution of equal academic rank. Graduates of approved secondary schools may meet these requirements by the satisfactory completion of the Collegiate course in Teachers College (see page 89), or of the first two years of the Course in Columbia College or Barnard College.

**2** Students admitted to this course are required to take Psychology **A**, Education **1, 2, 3, 9, 34, 36**, and to elect other courses amounting in all to a credit of 30 points for the two years of residence. The course of study in each year must be approved by the Standing Committee of the Faculty.

**3** The following course is recommended to students who have had no kindergarten training :

**FIRST YEAR**

Prescribed (14 points) : PSYCHOLOGY **A**—Elements of psychology— $1\frac{1}{2}$  points, first half-year  
 EDUCATION **3**—Application of psychology in teaching— $1\frac{1}{2}$  points, second half-year  
 EDUCATION **9**—Child study—2 points  
 KINDERGARTEN **1**—Gifts and occupations—3 points  
 KINDERGARTEN **2**—Songs and games—2 points  
 KINDERGARTEN **3**—Stories—2 points  
 MUSIC **2**—Sight singing—2 points

Elective (1-4 points)

**SECOND YEAR**

Prescribed (14 points) : EDUCATION **1**—History of education—3 points  
 EDUCATION **2**—Principles of education—3 points  
 EDUCATION **34**—Kindergarten principles—2 points  
 EDUCATION **36**—Methods and practice-teaching—6 points

Elective (1-4 points)

**TWO-YEAR COURSE LEADING TO THE DOMESTIC ART DIPLOMA**

**1** Candidates for admission to this course must give evidence (*a*) of having completed a satisfactory course in an approved secondary school, and (*b*) of collegiate study or technical training or experience in teaching during a period of at least two years following the secondary school course.

**2** Students who have the requisite academic attainments (*a*) for admission to this course, but lack professional or technical training (*b*), are required to pursue an introductory course as may be prescribed by the Committee on Admission.

**3** The following subjects are required of all candidates for the Domestic Art Diploma :

## FIRST YEAR

Prescribed (13 points): PSYCHOLOGY A—Elements of psychology—1½ points  
 EDUCATION 3—Applications of psychology in teaching—3 points  
 DOMESTIC ART 1—Sewing—1 point  
 DOMESTIC ART 2—Textiles—2 points  
 DOMESTIC ART 3—Drafting and making garments—3 points  
 MANUAL TRAINING 1—Hand work—3 points  
 FINE ARTS 9—Design—1 point  
 Recommended : History 5, Kindergarten 1, Domestic Science 1

Elective (2-5 points)

## SECOND YEAR

Prescribed (11 points): EDUCATION 1—History of education—3 points  
 EDUCATION 38—Principles and methods—2 points  
 DOMESTIC ART 5—Household art and design—2 points  
 DOMESTIC SCIENCE 1—Foods—4 points  
 Recommended : Domestic Art 8, Domestic Science 2, 7 and Education 40, Fine Arts 10 and 13

Elective (4-7 points)

## TWO-YEAR COURSE LEADING TO THE DOMESTIC SCIENCE DIPLOMA

**1** Candidates for admission to this course must give evidence (*a*) of having completed a satisfactory course in an approved secondary school, and (*b*) of collegiate study or technical training or experience in teaching during a period of at least two years following the secondary school course.

**2** Students who have the requisite academic attainments (*a*) for admission to this course, but lack professional or technical training (*b*), are required to pursue an introductory course as may be prescribed by the Committee on Admission.

**3** The following subjects are required of all candidates for the Domestic Science Diploma:

## FIRST YEAR

Prescribed (13 points): PSYCHOLOGY A—Elements of psychology—1½ points  
 EDUCATION 3—Application of psychology in teaching—3 points  
 DOMESTIC SCIENCE 1—Foods—4 points

DOMESTIC SCIENCE 2—Food production and manufacture—2 points

DOMESTIC SCIENCE 7—Household chemistry — 2 points

BIOLOGY 3—Physiology and hygiene—2 points

Elective (2-5 points)

#### SECOND YEAR

Prescribed (9 points):	EDUCATION 1—History of education—3 points EDUCATION 40—Theory and practice of teaching domestic science—2 points DOMESTIC SCIENCE 3—Foods, advanced course—4 points DOMESTIC SCIENCE 4—Home sanitation and economics—2 points
Elective (6-9 points)	Recommended: Education 42, Domestic Science 6, 8 and 9, Domestic Art 1, 2, 3 and Education 38, Manual Training 1 and History 5

#### SPECIAL COURSE IN HOSPITAL ECONOMICS

At the request of the American Society of Superintendents of Training-Schools for Nurses, Teachers College offers a special course in Hospital Economics. The aim of the course is to fit persons who are already trained nurses for the responsible duties of superintendents of hospitals and principals of training-schools for nurses. The requirements of this course are as follows:

**1** Each candidate must present a recommendation for admission from the Board of Examiners of the American Society of Superintendents of Training-Schools for Nurses, certifying to the moral character of the applicant, and her qualifications for undertaking professional work.

**2** The Board of Examiners require evidence of the satisfactory completion of an approved course (1) in a secondary school, normal school or college and (2) in a nurses' training-school, this to include evidence of satisfactory work in Anatomy, Physiology, Materia Medica, Applied Bacteriology, Urine Analysis, together with a general knowledge of practical nursing obtained by a two or three year course in a General Hospital. For full particulars concerning these requirements address the Secretary.

**3** The course of study is as follows:

Required (6 points):	PSYCHOLOGY A—Elements of psychology— $1\frac{1}{2}$ points EDUCATION 3—Application of psychology in teaching — $1\frac{1}{2}$ points
	HOSPITAL ECONOMICS 1—Methods and practice— 1 point
	HOSPITAL ECONOMICS 2—Hospital and training- school organization and supervision—2 points
Elective (9-12 points)	These courses are recommended: BIOLOGY 3—Physiology and hygiene—2 points DOMESTIC SCIENCE 1—Foods <i>or</i> DOMESTIC SCIENCE 2—Food production and manufacture <i>or</i> DOMESTIC SCIENCE 3—Foods, advanced
	 DOMESTIC SCIENCE 4—Home sanitation and manage- ment—2 points DOMESTIC SCIENCE 6—Bacteriology—1 point DOMESTIC SCIENCE 7—Household chemistry—2 points

Students who can satisfy the requirements in any subject may elect other subjects of equal credit in any department of the College with the approval of the Dean and the professor concerned.

**TWO-YEAR COURSE LEADING TO THE FINE ARTS  
DIPLOMA**

**1** Candidates for admission to this course must give evidence (*a*) of having completed a satisfactory course in an approved secondary school, and (*b*) of collegiate study or technical training or experience in teaching during a period of at least two years following the secondary school course.

**2** Students who have the requisite academic attainments (*a*) for admission to this course, but lack professional or technical training (*b*), are required to pursue an introductory course as may be prescribed by the Committee on Admission.

**3** The following subjects are required of all candidates for the Fine Arts Diploma:

**FIRST YEAR**

Prescribed (15 points):	PSYCHOLOGY A—Elements of Psychology— $1\frac{1}{2}$ points EDUCATION 3—Applications of psychology in teaching $1\frac{1}{2}$ points
	FINE ARTS 3—Drawing and painting—3 points
	FINE ARTS 6—Sketch class—2 points

FINE ARTS 8—Clay modelling—1 point  
 FINE ARTS 9—Design—2 points  
 FINE ARTS 13—Art interpretation—1 point  
 FINE ARTS 14—Applied freehand drawing—2 points  
 MANUAL TRAINING 8—Mechanical Drawing — 2 points

Elective (0-3 points)

SECOND YEAR

Prescribed (14 points): EDUCATION 1—History of education—3 points  
 EDUCATION 11—Principles and methods in art teaching—2 points  
 FINE ARTS 4—Drawing and painting, advanced course—3 points  
 FINE ARTS 10—Advanced design—2 points  
 FINE ARTS 15—History of art—1 point  
 FINE ARTS 16—Portrait—3 points

Elective (4 points)

**TWO-YEAR COURSE LEADING TO THE MANUAL TRAINING DIPLOMA**

**1** Candidates for admission to this course must give evidence (*a*) of having completed a satisfactory course in an approved secondary school, and (*b*) of collegiate study or technical training or experience in teaching during a period of at least two years following the secondary school course.

**2** Students who have the requisite academic attainments (*a*) for admission to this course, but lack professional or technical training (*b*), are required to pursue an introductory course as may be prescribed by the Committee on Admission.

**3** The following subjects are required of all candidates for the manual training diploma for elementary schools:

FIRST YEAR

Prescribed (14 points): PSYCHOLOGY A—Elements of psychology—1  $\frac{1}{2}$  points  
 EDUCATION 3—Applications of psychology in teaching—1  $\frac{1}{2}$  points  
 MANUAL TRAINING 1—Manual training for primary grades—3 points  
 MANUAL TRAINING 2—Woodworking for elementary schools—4 points  
 MANUAL TRAINING 8—Mechanical drawing—2 points  
 FINE ARTS 1—Elementary freehand drawing—2 points

Elective (1-4 points) Suggested Elective—Fine Arts 8, Fine Arts 11

## SECOND YEAR

Prescribed (11 points) : EDUCATION 1—History of education—3 points  
 EDUCATION 22—Principles and methods—2 points  
 MANUAL TRAINING 3—Woodworking for secondary schools—5 points  
 FINE ARTS 9—Design—1 point

Elective (4-7 points) Suggested Electives—Fine Arts 2, Fine Arts 3, Fine Arts 6, Fine Arts 11, Fine Arts 14, Domestic Art 2, Manual Training 9, Education 11, Education 32. Students desiring to specialize in work for the lower grades and who elect Fine Arts 3, Fine Arts 6, Fine Arts 8 and Education 11, may omit Manual Training 3 in the second year of the above course.

The following subjects are required of all candidates for the manual training diploma for secondary schools:

## FIRST YEAR

Prescribed (14 points) : PSYCHOLOGY A—Elements of psychology—1½ points  
 EDUCATION 3—Applications of psychology in teaching—1½ points  
 EDUCATION 22—Principles and methods—2 points  
 MANUAL TRAINING 3—Woodworking for secondary schools—5 points  
 MANUAL TRAINING 8—Mechanical drawing—2 points  
 FINE ARTS 1—Elementary freehand drawing—2 points  
 Elective (1-4 points) Suggested Elective—Fine Arts 8

## SECOND YEAR

Prescribed (13 points) : EDUCATION 1—History of Education—2 points  
 EDUCATION 32—Organization and supervision of manual training—2 points  
 { MANUAL TRAINING 4—Turning and pattern-making—4 points and  
 { MANUAL TRAINING 5—Moulding and foundry practice—2 points or  
 MANUAL TRAINING 6—Forging—6 points or  
 MANUAL TRAINING 7—Machine work—6 points  
 MANUAL TRAINING 9—Mechanical drawing—2 points  
 FINE ARTS 9—Design—1 point  
 Elective (2-5 points) Suggested Elective—Education 32, History 5

The purpose of the courses in manual training is to prepare teachers and supervisors of manual training for the elementary and secondary schools. The twofold problem of technical skill and methods of teaching is considered in each phase of the work. A high standard of performance is insisted upon, but this fact is only a part in the larger aim of relating such skill to the uses of the school. The end constantly in view is the employment of hand work as a

natural medium of expression during the period of school life, and method and matter are measured by the degree that they contribute to this end.

The regular courses include: (1) training in the various branches of hand work applicable to school uses, accompanied by a study of typical examples of such work in their relations to boy and girl life; (2) instruction in mechanical and freehand drawing and decorative design, as related to the needs of manual training; (3) study of the philosophy, methods and organization of manual training; (4) systematic instruction in psychology and the history of education. Each candidate for the diploma is required to observe classes in the Horace Mann School, and, to a limited extent, opportunities for practice-teaching in these classes will be arranged.

### TWO-YEAR COURSE LEADING TO THE MUSIC DIPLOMA

**1** Candidates for admission to this course must give evidence (*a*) of having completed a satisfactory course in an approved secondary school, and (*b*) of collegiate study or technical training or experience in teaching during a period of at least two years following the secondary school course.

**2** Students who have the requisite academic attainments (*a*) for admission to this course, but lack professional or technical training (*b*), are required to pursue an introductory course as may be prescribed by the Committee on Admission.

**3** The following subjects are required of all candidates for the Music Diploma:

#### FIRST YEAR

Prescribed (10 points): PSYCHOLOGY **A**—Elements of psychology—1½ points  
 EDUCATION **3**—Applications of psychology in teaching—1½ points  
 MUSIC **1**—Sight Singing—2 points  
 MUSIC **1c\***—General music course—1 point  
 MUSIC **3c**—Harmony—2 points  
 MUSIC **4**—Voice culture—2 points

Elective (5-8 points)

#### SECOND YEAR

Prescribed (12 points): EDUCATION **1**—History of Education—3 points  
 EDUCATION **43**—Theory and practice of teaching school music—2 points  
 MUSIC **2**—Sight singing—2 points  
 MUSIC **3**—Musical art—1 point  
 MUSIC **2c**—General music course—1 point  
 MUSIC **7c**—Musical seminar—1 point  
 MUSIC **5**—Voice culture—2 points

Elective (3-6 points)

\* Courses offered in Columbia College are marked “c”.

## COLLEGIATE COURSE

**1** The purpose of this course is to give advanced academic training to students who intend later to enter upon a course of professional training for teaching in elementary schools and kindergartens. The instruction given is of collegiate grade, but in the choice of subjects and manner of presentation the needs of teachers are constantly kept in mind. It is offered as an alternative for the first two years of the course in Columbia College or Barnard College. No diploma is granted on the completion of this course, but a student may receive a certificate signed by the Dean indicating the work actually performed.

**2** Candidates for admission to this course must (1) present an academic diploma, or the equivalent academic certificate, from the Regents of the University of the State of New York (a statement of the conditions under which graduates of high schools in other states may secure the equivalent academic certificate of the University of the State of New York may be had upon application to the Director of the High School Department, Regent's Office, Albany, New York); or (2) present a certificate of having passed satisfactorily the examinations of the College Entrance Examination Board for the Middle States and Maryland, on the same subjects as are prescribed for admission to the undergraduate colleges of Columbia University (detailed information regarding the examinations of the College Entrance Examination Board and of the privileges accorded to students holding certificates from this Board, may be obtained either by addressing the Secretary of Teachers College, or the Secretary of the College Entrance Examination Board, Sub-Station 84, New York, N. Y.); or (3) pass satisfactory examinations as prescribed for admission to the undergraduate colleges of Columbia University.

The candidates *must* offer

English (p. 10).....	counting 3 points
Elementary Mathematics.....	" 3 "

and 9 points from the subjects following, of which four must be in foreign languages:

Elementary French.....	counting 2 points
Elementary German.....	" 2 "
Elementary Latin.....	" 4 "
Elementary Greek.....	" 3 "
Elementary History.....	" 1 point
Elementary Physics.....	" 1 "
Chemistry .....	" 1 "
Botany.....	" 1 "
Physiography .....	" 1 "
Zoölogy .....	" 1 "
Spanish .....	" 2 points
Advanced Latin.....	" 1 point
Advanced Greek.....	" 1 "
Advanced French.....	" 1 "
Advanced German.....	" 1 "
Advanced History.....	" 1 "
Advanced Mathematics.....	" 1 "
Advanced Physics.....	" 1 "
Freehand Drawing.....	" 1 "

The requirement in English is that recommended by the Conference on Uniform College Entrance Requirements in English.

No applicant will be accepted in English whose work is notably defective in point of spelling, grammar, idiom, punctuation or division into paragraphs.

The requirement in Elementary Mathematics is as follows :

1. Algebra to quadratics.

Factors, common divisors and multiples, fractions, equations of the first degree with one or more unknown quantities, evolution, the doctrine of exponents, radicals, radical equations reducible to equations of the first degree and putting problems into equations.

2. Algebra from quadratics.

Quadratic equations, equations with one or more unknown quantities that can be solved by the methods of quadratic equations, problems depending upon such equations, ratio and proportion, and the binomial theorem for positive entire exponents.

3. Plane geometry.

Plane geometry, including the solution of simple original exercises and numerical problems.

In other subjects greater freedom in substitution and election is permitted. The normal requirements in the several subjects are given in a special circular issued by the University, which will be sent to any address upon application to the Secretary.

Entrance examinations will be held in 1901 the weeks beginning June 17 and September 30. The June examinations will be conducted at Columbia University by the College Entrance Examination Board for the Middle States and Maryland. Candidates for these examinations will apply direct to the Secretary of the College Entrance Board, Sub-Station 84, New York, N. Y.

The September examination will be conducted by the Columbia University Committee on Entrance Examinations. Candidates for these examinations will apply direct to the Secretary of Teachers College.

**3** Students in the Collegiate Course are required to take courses amounting in all to thirty points for the two years of residence. The courses necessary to meet these requirements may be chosen by the student at will from the courses announced each year, subject to the approval of the standing committee of the Faculty and to the following general regulations:

*Prescribed:*

**(a)** For all students:

ENGLISH **1**—Composition and Literature—3 points

ENGLISH **2**—Composition and Literature—2 points

HISTORY **1**—Mediæval and Modern—3 points

**(b)** For students who do not offer the following subjects at entrance, the courses appearing in connection with them (unless a more advanced course in the same department is elected), respectively:

<i>Entrance Subjects.</i>	<i>College Courses.</i>
<b>1</b> —German.....	German <b>A</b> —3 points
<b>2</b> —French .....	French <b>A</b> —3 points or German <b>2</b> —3 points
<b>3</b> —Advanced Mathematics.....	Mathematics <b>A</b> —3 points
<b>4</b> —Freehand Drawing .....	Fine Arts <b>1</b> —2 points

Also four of the courses following unless offered at entrance:

<b>5</b> —Chemistry .....	Physical Science <b>1</b> —2 points
<b>6</b> —Physics.....	Physical Science <b>2</b> —2 points
<b>7</b> —Botany.....	Biology <b>1</b> —2 points
<b>8</b> —Zoology.....	Biology <b>2</b> —2 points
<b>9</b> —Physiography.....	Geography <b>6</b> —2 points

Students will not be permitted to take courses in any one department amounting to a credit of more than 6 points in any year.

Courses in the Department of Education (except Psychology **A** and Education **3**, which are recommended to sophomores) are not open to collegiate students. Electives should be selected with a view to the professional course that is to follow.

1. Reading and composition.—The candidate will be required to present evidence of a general knowledge of the subject-matter of the prescribed books, and to answer simple questions on the lives of their authors.

The books prescribed for this part of the examination are as follows :

In 1901 and 1902 : Shakspere's Merchant of Venice; Pope's Iliad, Books I, VI, XXII, and XXIV; The Sir Roger de Coverley Papers in the Spectator; Goldsmith's Vicar of Wakefield; Coleridge's Ancient Mariner; Scott's Ivanhoe; Cooper's Last of the Mohicans; Tennyson's Princess; Lowell's Vision of Sir Launfal; George Eliot's Silas Marner.

2. Study and composition.—This part of the examination presupposes the thorough study of each of the works named below.

The books prescribed for this part of the examination are as follows :

In 1901 and 1902 : Shakspere's Macbeth; Milton's Lycidas, Comus, L'Allegro and Il Penseroso; Burke's Speech on Conciliation with America; Macaulay's Essays on Milton and Addison.

## SPECIAL COURSES

The College offers special courses of study to teachers or intending teachers of proper qualifications who wish, without reference to any degree or diploma, to make a serious study of any special subject, or group of subjects. Each candidate for admission to such special courses must make application in writing to the Dean, and give evidence of ability to use the English language correctly and of special fitness for the study that he wishes to pursue.

Except for reasons of weight, no one will be received as a special student who has, within ten months of the time of his application, been rejected as a regular student by the Committee on Admission, or has, within that time, become deficient as a regular student.

Certain courses are open to auditors on payment of a special fee. Auditors are not matriculated as students of the College, and no credit is given for any work they may do. No auditor will be admitted to any course without the consent of the instructor. An auditor, if qualified, may become a special student at the end of the year by meeting the requirements of the courses attended as an auditor.

## EXTENSION COURSES

Teachers College offers to teachers of New York and vicinity the opportunity to pursue in local circles a systematic course of professional study under the guidance of College instructors. Such courses are known as extension courses. They are always an integral part of some resident course, and are given in the same manner as to resident students. Each course consists normally of thirty sessions of one hour each, thus allowing a one-hour course to be given in one year and a two-hour course in two years. Students who matriculate in Teachers College, having satisfied the requirements for admission to some course of study, may count the extension courses towards any diploma for which the corresponding regular courses may be counted.

Any responsible organization of teachers may secure an extension course on condition of paying a minimum fee (to be determined in each case by the expense of giving the course), provided that no member of the class pays less than \$10 for a course of thirty lessons. Local circles are also required to provide, without cost to the College, a suitable class room and the necessary equipment, heat, light and janitor service for conducting the work. A special circular, descriptive of extension courses which are offered by the various departments for the year 1901-1902, will be sent to any address on application to the Secretary.

## SUMMER SESSION

The second Summer Session of Columbia University, including Teachers College, will open on July 8, 1901, and close on August 16. The courses offered are framed with a view to meeting the needs of teachers in elementary, secondary and normal schools, and in colleges, especially those who look forward to a degree or a diploma from Teachers College. Due credit for the courses of the Summer Session will be given to candidates for degrees or for Teachers College diplomas.

The Announcement of the Summer Session, containing a detailed statement of the several courses, information con-

cerning these, and concerning the arrangements which students may make for board and lodging, will be sent on application to the Secretary of Columbia University.

The courses to be offered at the Summer Session of 1901 are the following:

DEPARTMENT OF EDUCATION:

History of Modern Education—Professor MONROE

Principles of Education—Professor BUTLER and Dr. MAC VANNEL

General Method in Elementary Instruction—Dr. CHARLES A. McMURRY

Special Method in Elementary Instruction—Dr. CHARLES A. McMURRY

Methods of Teaching English. 2 courses.—Professor BAKER

Nature Study in Elementary School—Miss CARSS

DEPARTMENT OF ENGLISH:

Rhetoric and English Composition. 2 courses.—Professor G. R. CARPENTER, Mr. BREWSTER and Miss GILLESPIE

Chaucer—Professor JACKSON

Shakspere—Professor JACKSON

English Literature of the 19th Century—Professor TRENT

DEPARTMENT OF FINE ARTS:

History and Interpretation of Art—Mr. KELLOGG

DEPARTMENT OF GERMAN:

Elementary Course—Mr. HERVEY

Intermediate Course—Mr. HERVEY

History of German Literature—Mr. HERVEY

DEPARTMENT OF HISTORY:

Mediæval History—Professor MONROE

United States History, during the formation of the Nation  
—Dr. CUSHING

English History, especially from 1660 to 1714—Dr. CUSHING

DEPARTMENT OF LATIN:

Juvenal: Roman Life and Customs—Professor EGBERT

The Annals of Tacitus: practice in reading Latin—Professor EGBERT

## DEPARTMENT OF MANUAL TRAINING:

Manual Training in Elementary Schools. 2 courses.—Mr. EKLÖF and Miss WEISER

## DEPARTMENT OF MATHEMATICS:

Trigonometry and Logarithms—Mr. KEYSER

Advanced Algebra—Mr. KEYSER

Differential and Integral Calculus—Mr. KEYSER

## DEPARTMENT OF PHILOSOPHY:

Introduction to the Study of Philosophy—Professor BUTLER and Dr. MAC VANNEL

Logic: Deductive and Inductive Reasoning, Scientific Method—Professor BUTLER and Dr. JONES

Advanced Course: Special Topics in Modern Philosophy—Professor BUTLER and Dr. MAC VANNEL

## DEPARTMENT OF PHYSICAL TRAINING:

Physical Training in Elementary Schools. 2 courses.—Miss BANCROFT

Systematic Physical Training, including use of apparatus. 2 courses.—Dr. SAVAGE, Mr. BOJUS, Mr. HOLROYD and Mr. SEIKEL

All students in the Department of Physical Training will receive instructions in swimming.

## DEPARTMENT OF PHYSICS:

General Physics—Professor HALLOCK and Dr. TUFTS

Laboratory Course in General Physics—Professor HALLOCK and Dr. TUFTS

Teaching Physics in Secondary Schools—Professor HALLOCK and Dr. TUFTS

Research Course—Professor HALLOCK

## DEPARTMENT OF PSYCHOLOGY:

Elements of Psychology—Dr. JONES

Experimental Psychology—Professor THORNDIKE

Genetic Psychology—Professor THORNDIKE

Research Course—Professor THORNDIKE

## DEPARTMENT OF ROMANCE LANGUAGES:

French Literature—Mr. LOISEAUX

Elementary Spanish—Mr. LOISEAUX

Arrangements have also been made for excursions, under guidance, to points of historic interest and to the great New York museums. The collections in these museums will be interpreted and explained to students.

During the Summer Session lectures on subjects of general interest in the fields of science and literature, will be delivered by professors of the University.

## REGULATIONS FOR DEGREES

### **The Degree of Bachelor of Science**

The degree of Bachelor of Science will be conferred by Columbia University upon persons recommended by the Faculty of Teachers College as having satisfactorily completed a four-years' course of study, provided that such course shall include (1) the subjects of the Teachers College Collegiate Course or their equivalent in an approved institution of learning, and also (2) a two-years' professional course leading to a college diploma. Candidates for the degree of B. S. are advised to elect such subjects during the professional course that not more than 16 points shall be devoted to courses in the Department of Education.

The steps necessary to secure the B.S. degree are the following:

- (a) Requirements for admission to the Collegiate Course (pages 89-93);
- (b) The Collegiate Course—30 points (pages 89-93);
- (c) A two-years' professional course—30 points—leading to a diploma (pages 81-89).

Students who take the degree of B.S. may continue the study of Education, either as a major or minor subject, in partial fulfillment of the requirements for the degrees of A.M. and Ph. D.

### **The Degree of Bachelor of Arts**

The degree of Bachelor of Arts will be conferred by Columbia University upon men who are recommended by the Faculty of Columbia College and upon women who are

recommended by the Faculty of Barnard College, as having satisfactorily completed the four-years' course of study prescribed by these faculties, respectively. Students in Teachers College who meet these requirements, including the requirements for admission, may pursue at the same time the course leading to the degree of A.B. and the course leading to a diploma. All courses in Teachers College are open to qualified students of Columbia College and Barnard College, and the courses in Columbia College and Barnard College are open to men and women respectively who are qualified to pursue them.

#### **The Degrees of Master of Arts and Doctor of Philosophy**

The University degrees of A.M. and Ph.D. are conferred upon the recommendation of the Faculties of Philosophy, Pure Science and Political Science. The University faculties regard education as a subject for research and investigation; Teachers College lays stress upon its professional aspect. The advanced courses of instruction in Teachers College, therefore, chiefly those in the Department of Education, may be counted in partial fulfillment of the requirements for the degrees of master of arts or doctor of philosophy. Graduate students who conform to the general regulations of the University Council may thus pursue at the same time, with no additional expense, courses leading to a Teachers College diploma and to a University degree.

The regulations for graduate students in Teachers College who become candidates for a University degree, are as follows:

**I** Candidates for the degree of master of arts and doctor of philosophy must hold a bachelor's degree, or its equivalent from a European institution, and are required to select one major and two minor subjects, and to pursue the same in residence for a minimum period of one and two years, respectively. Ordinarily a somewhat longer time is required to obtain the degree of doctor of philosophy. Students who have been in residence in another university will be given credit therefor; but a residence of at least one year at Columbia University is required of all candidates for these degrees.

The detailed regulations governing candidates for these degrees will be found in the catalogue of Columbia University for 1900-1901, page 207; or in the announcement of the current year of the School of Philosophy, which will be sent on application to the Secretary of Columbia University. Suggestions as to graduate courses in various subjects will be found in the Announcements of the different departments of the University.

**2** Teachers College students who are candidates for either of these degrees will be required to observe the following additional regulations:

- (a) The subjects chosen as major and minor must receive the approval of the Dean of Teachers College.
- (b) Education must be chosen either as a major subject or as one of the two minor subjects by every candidate for either of these degrees. When any candidate for a higher degree selects courses in education amounting to more than six hours per week, he may be permitted to count the subject of Education as the equivalent of a major and one minor subject.

## FELLOWSHIPS AND SCHOLARSHIPS

### Teachers College Fellowships

**1** Four fellowships, known as "Teachers College Fellowships," were founded by the Board of Trustees in 1896. They are awarded annually by the University Council on the recommendation of the Faculty of Teachers College to those applicants who give evidence of special fitness to pursue courses of higher study and original investigation in education. The competition is open to graduates of all colleges and scientific schools, and to teachers of experience who may be qualified to become candidates for the higher diploma of Teachers College. Vacancies occurring in any such fellowships are filled in the same manner in which original appointments are made.

**2** The application shall be made prior to May 1, in writing, addressed to the Dean of Teachers College. The term of

the fellowship is one year, dating from July 1. Residence should begin October 1.

3 The candidate must give evidence

(a) of a liberal education, such as a testimonial of the satisfactory completion of a systematic course of study;

(b) of decided fitness for undertaking original research in educational lines, such as an example of some professional work already performed;

(c) of upright character, such as a testimonial from some instructor.

4 The value of each fellowship is six hundred and fifty dollars. Payments will be based on the time during which the fellow shall have been in residence, and are made in monthly installments, from October to July. The holder of a fellowship is required to pay all established fees.

5 Every holder of a fellowship will be expected to perform such duties as may be allotted to him in connection with his course of study, which course shall be such as to lead to the higher diploma, Education in each instance being the major subject. He will be expected before the close of the academic year to give evidence of progress by the preparation of a thesis, the completion of a research, the delivery of a lecture, or by some other method. He must reside in New York or vicinity during the academic year.

6 No holder of a fellowship shall be permitted to accept any remunerative employment during his term. With the written approval of the Dean, but not otherwise, he may give instruction or assistance in any department of Teachers College.

7 A fellow may be reappointed at the end of a year for reasons of weight. No fellow may be reappointed for more than two terms of one year each.

#### Manual Training Fellowship

8 A fellowship, known as the "Manual Training Fellowship" was founded in 1896 by the Trustees of Teachers College for the encouragement of research in the manual arts. It is awarded annually by the Faculty in the same manner as are

other College fellowships. The income of this fellowship is six hundred and fifty dollars, payable in monthly installments, from October to July, and the holder is required to pay all established fees.

**9** This fellowship will be awarded to the one who gives evidence of being able to contribute most toward the solution of the problem of manual training in the elementary school. Each applicant must have been a successful teacher of manual training to children from nine to thirteen years of age; he must submit a course of study planned by himself for some grade or grades of the elementary school; he must have sufficient command of the English language to write acceptably for publication. It is desirable that he have a complete college education and be able to read German readily. If there should be no suitable applicant for this fellowship, it will be awarded on the same conditions as obtain for other College fellowships.

#### Teachers College Scholarships

**10** Nine scholarships, established by the Trustees of Teachers College in 1898, will be awarded annually by the Faculty, on the same conditions as obtain for the College fellowships. They are of an annual value of one hundred and fifty dollars, and may be renewed for a second term of one year in case the holder gives evidence of superior ability.

**11** All stipends of scholars are paid in equal semi-annual installments on the last Saturday of October and the third Saturday in February of each academic year. College scholars will be required to pay all fees established for matriculation, tuition and graduation.

**12** Application for College scholarships should be made, in writing, prior to March 1, and addressed to the Dean of Teachers College. An unsuccessful applicant for a fellowship may apply for a scholarship without changing the form of his original application.

**13** Teachers College scholars will be required to enroll themselves as candidates for the higher diploma or a higher degree, and pursue a regular course of study leading thereto.

**14** All College fellowships and scholarships are open, under the general regulations of Columbia University and Teachers College, to men and women alike.

#### Special Scholarships

**15** A scholarship known as the "Tileston Scholarship," of the annual value of seventy-five dollars, founded in 1891 by Mrs. Peter M. Bryson, is awarded annually at the discretion of the Faculty to an undergraduate student of the College.

**16** A scholarship known as the "Shackleford Scholarship," of the annual value of seventy-five dollars, founded in 1892 by the Misses Shackleford, is awarded annually at the discretion of the Faculty to an undergraduate student of the College.

**17** A scholarship known as the "Pierrepont Scholarship," of the annual value of seventy-five dollars, founded in 1893 through Miss Annie L. Pierrepont, is awarded annually at the discretion of the Faculty to an undergraduate student of the College.

**18** A scholarship known as the "Pond Scholarship," of the annual value of seventy-five dollars, founded and endowed in 1895 by Mrs. Frank Porter, is awarded annually at the discretion of the Faculty to an undergraduate student of the College.

**19** A scholarship known as the "Low Scholarship," of the annual value of two hundred dollars, founded in 1895 by Miss Annie L. Pierrepont, is awarded annually at the discretion of the Faculty to a student in the Kindergarten Department.

**20** A scholarship known as the "Charlotte Louisa Williams Scholarship," of the annual value of one hundred and fifty dollars, founded and endowed in 1897 by Mrs. Peter M. Bryson and Miss Grace H. Dodge, is awarded annually at the discretion of the Faculty. This scholarship is open to women only.

**21** A scholarship known as the "Earl Scholarship" of the

annual value of one hundred and fifty dollars, founded and endowed in 1897, is awarded annually at the discretion of the Faculty. This scholarship is open to men only.

**22** A scholarship known as the "Hoadley Scholarship," of the annual value of one hundred and fifty dollars, founded and endowed in 1899, is awarded annually at the discretion of the Faculty.

#### COLLEGE LOAN FUNDS

##### Ruth Loan Fund

A fund known as the "Ruth Loan Fund" was established in 1896, to enable students in the later years of the course to supplement means already at their command. In several instances this fund has made it possible for students to attend the College who would otherwise have been unable to do so. The student is required to give a note for the amount borrowed, payable at some definite time, with interest at two per cent.

Applications should be made prior to September 1, in writing, addressed to the Dean of Teachers College.

##### General Loan Fund

A fund known as the "General Loan Fund" was established in 1897. Its purpose and regulations are identical with those of the Ruth Loan Fund.

##### Students' Aid

In a limited number of cases, the College is able to offer students clerical work, or work of similar nature, payable from the Students' Aid Fund, at the rate of twenty-five cents an hour. This work can be granted only to students whose scholarship and health warrant the assignment. Application should be made before September 1, in writing, addressed to the Dean of Teachers College.

## TEACHERS COLLEGE SCHOOLS

A distinctive feature of the College is the opportunity it affords for practical work. Not only are students encouraged to visit schools and familiarize themselves with the processes and results of teaching and supervision in the schools of New York and its vicinity, but they are also required, as soon as they have become qualified, to demonstrate their own ability to teach and judge of teaching, and to plan lessons and courses of study in the schools of Teachers College, which present all phases of school work.

In the kindergarten, opportunities are afforded the children, under the guidance of trained kindergartners, to associate with other children, and through song, story, play and like activities, to come in contact with life and lay the foundation for future studies.

During the seven or eight years following the kindergarten, usually from the sixth to the fourteenth year, children of requisite attainments may be placed in the elementary school, and there receive the elements of a liberal education. In these years they learn to use their mother tongue, to read and to love good reading; they study the beginnings of the world's history, and become intelligently interested in the history and government of their own country; they become acquainted with the facts and laws of nature—studying plants and animals, their types and families and how to know them, how they live and how they are adapted to their environment; studying the earth and how it changes and grows old, and how these changes affect the life of man; studying light, heat, air and water, what they do and what can be done with them; they are taught to measure and calculate accurately and readily, and are trained to think and use common sense about the affairs of daily life; they learn to model, paint and draw, to appreciate good form, color and ornament, and to use tools and implements in making objects in paper, wood and iron; they learn to sing by ear and by note, and (if girls) they learn the elements of housewifery; gymnastic exercise is given

throughout the course, and above all, there is afforded to each child the opportunity of daily practice, under the most favoring conditions, in the art of living with others in society —the democratic society of an American school.

The next four years, from thirteen or fourteen to seventeen or eighteen, are spent in the high school. Choice is permitted at the outset, according to individual destination or aptitude, between a course leading to a college of liberal arts or to a professional or technical school, and a course designed to give a more general culture and training. A college preparatory pupil elects from the studies offered those required for entrance to the college of his choice. No such pupil is expected or permitted to take all the subjects offered; but every such pupil is encouraged to make his preparatory course as liberal as circumstances admit. The general course is intended primarily for those who will not enter college.

In the various grades and classes there are being worked out, in the light of educational theory and practical experience, the typical problems of the day, and the College students are made sharers with their teachers both in the processes and in the results of these investigations. No small advantage comes from the fact that the schools of Teachers College represent a complete school system with a full administrative force. This gives facilities not only for the practical application of principles and method in the teaching of classes and management of a school, and for the study of principals' and superintendents' methods of work, but for experiment and research in all phases of public school effort, including the broader educational movements which bring the school into more vital connection with community life.

## BUILDINGS AND EQUIPMENT

The College is situated on Morningside Heights, between Amsterdam Avenue and Broadway. This location is singularly fortunate. The main buildings of Columbia University, Barnard College, the Grant Monument, St. Luke's Hospital, the Cathedral of St. John the Divine, and the Academy of

Design are in the immediate vicinity. Morningside and Riverside Parks are within two blocks, and Central Park is easily accessible. The site commands a fine view eastward of the city and the Harlem River, westward and northward of the Hudson and the Palisades. The elevated railroad three blocks away, and the two lines of electric street cars which pass the grounds, make the College accessible from all parts of the city at the rate of a single fare.

The College buildings—three in number—are so arranged about a rectangular court and connected by corridors that they practically form one building. The Main Building has a frontage on 120th Street of 230 feet. It is devoted to rooms for the Trustees, the Dean, and Registrar; the general business offices of the College and teachers' offices; class rooms, conference rooms and lecture rooms of the Department of Education; rooms for the Horace Mann School; the Bryson Library and reading rooms; a general reception room, and a gymnasium. The fourth floor is occupied by the Division of Science, and contains a lecture room, with stereopticon, laboratories and all the appointments needed for the department.

The Milbank Memorial Building, occupied for the first time in September, 1897, is the gift of Mr. Joseph Milbank, as a memorial of his parents. It contains Memorial Chapel, the offices and class-rooms of the Departments of English, History, Mathematics, Latin, Greek, and Music, lecture rooms and appointments for the Department of Biology and the Departments of Domestic Science and Art, a large study room and social hall for the students of all departments, a lunch room, and a bicycle store room. From all floors there are uninterrupted views of the Hudson and the Palisades.

The Macy Manual Arts Building, which was given by Mrs. Josiah Macy as a memorial of her husband, is occupied by the Departments of Manual Training and Fine Arts. It is thoroughly equipped with the best modern appliances for manual training and art work, and contains four large rooms for wood-working, including wood joinery, wood carving, wood-turning and pattern making, four for metal working, chipping and filing, tin-smithing, moulding and casting,

forging and machine tool work, two for clay modeling, two for constructive drawing,—one mechanical and the other architectural,—two for elementary freehand drawing, and two studios for advanced drawing and painting. Connected with these are store rooms for tools, supplies, models and finished work. In addition to these, there are a lecture room, provided with a stereopticon, and many smaller rooms, such as offices, library, museum, conference rooms, photography room, engine room and stock room.

The walls of the rooms and corridors throughout the buildings are hung with fine photographs, prints, casts and models carefully arranged in appropriate departments.

There is now in process of construction a new building for the exclusive use of the Horace Mann School. It will accommodate about one thousand pupils, arranged for a nearly equal division into elementary and high schools. It contains 39 class and recitation rooms, an auditorium, a library, large teachers' rooms adjoining the library, conference rooms, studios, a gymnasium, lunch rooms and general dependencies to be used in common. The latter are arranged to meet the requirements of a school of this character, and comprise numerous general toilet rooms on each floor, teachers' private toilets on each floor, shower baths and locker accommodations for the gymnasium, an emergency room to be used in case of illness, separate cloak rooms for boys and girls connected with each class room, a book lift connecting the library with each floor, a passenger elevator, a system of clocks, program bells, telephones, electric light, indirect steam heating, artificial ventilation and other accessories calculated to make this a modern school building of the most advanced type.

The College is well supplied with all the necessary work shops, laboratories, studios, etc., in all the departments in which such work can be conducted. Each room is equipped for its special purpose, and an effort has been made to have the equipment and opportunities peculiarly adapted to the needs of teachers. The various departments are well supplied with photographs, engravings, and lantern slides, for illustra-

tive purposes, and several departments are equipped with special collections that are unique and of great value.

New York City offers special inducements to students in its libraries, museums, studios, art rooms and parks. Among such may be mentioned the Metropolitan Museum of Art, the National Academy of Design, the Art Students' League, the Astor and Tilden Libraries, the American Museum of Natural History, the Botanical Garden, the Zoological Park and the Aquarium. Historically and geographically New York City is a centre of great interest, and the available means of quick communication in all directions make the field opportunities very accessible and important.

Lovers of music and the drama also have abundant opportunity for securing the best in these lines, and the various settlements and missions offer splendid opportunities for philanthropic work in lines closely associated with Education.

## LIBRARY FACILITIES

### *The Bryson Library*

The library was founded by Mrs. Peter M. Bryson as a memorial of her husband. It contains some 16,000 volumes, comprising works in English, French and German on the history and philosophy of education, the theory and practice of teaching, psychology, sociology, anthropology, art, etc. A special collection has recently been acquired containing upwards of 6,000 educational monographs, and national, state, municipal, and local reports on school affairs in this country during the present century. This collection, when added to the material in the University Library, will form an invaluable source of study in the history of education and school administration in America. There is also a collection of 2,000 text books covering all grades from the primary through the High School, and a special collection of art works, photographs, engravings and books on art criticism.

Although the main purpose of the library is to afford to special students of education opportunities for research and advanced professional study, it also contains a selected list of

general works on philosophy, history, literature and science; so that each department has library facilities to enforce and supplement its work. For the use of the pupils of the school, the student-teachers, and the teachers of the city, there is also provided a collection of books on history, literature, biography, geography, travels, arts, science and technology adapted to pupils in the elementary and secondary school. The library serves as reading room, and has on file over 160 of the leading periodicals, those bearing upon education being best represented, and including French, German and English, as well as American publications. The annual additions to the library reach about 2,000 volumes.

#### The Columbia University Library

Students and officers of Teachers College have free access to the Columbia Library between the hours of 8.30 A.M. and 11 P.M. The library contains about 285,000 volumes, exclusive of unbound pamphlets and duplicates. The additions to the library for the past five years have averaged over 18,000 volumes annually. The library is well supplied in all the subjects taught in the various courses of the University. Special mention may be made of its important collection of historical material for the study of American history, and its Avery Architectural Library, one of the most complete collections in the world.

The reference library, of about 10,000 volumes, consists of a carefully selected body of reference books and of the most important works on all subjects in standard editions, representing the leading authors in all literatures.

Connected with the stacks in which are stored the books relating especially to the Departments of Philosophy, Education, Literature and Philology, the Sociological and Economic Sciences, Public Law and History, are eighteen special study rooms, open only to authorized readers. This arrangement is intended to give to advanced students and investigators in these fields the fullest opportunity to carry on their work by the use of quiet rooms in the immediate vicinity of the literature of their subjects.

## DEVOTIONAL EXERCISES

Devotional exercises are conducted in Milbank Memorial Chapel daily at 12.20.

Teachers College is a Christian institution, but it is non-sectarian in spirit. It therefore welcomes all creeds to its classes, and invites every student to join daily in a devotional exercise conducted on the broadest possible plane of aspiration and worship.

## TEACHERS COLLEGE PUBLICATIONS

TEACHERS COLLEGE RECORD is a serial publication supported by Teachers College of Columbia University. The purpose of the series is to give the Faculty and students of the College a comprehensive view of the actual workings of the schools of observation and practice, to provide graduates of the College with a means of prolonging their professional studies, and to acquaint the public generally with the theory and practice of teaching adopted in Teachers College.

Each number of the RECORD treats of a specific problem in the work of the kindergarten, elementary school, high school or some department of the College. The topics for presentation are selected from the following list: The history, organization and administration of Teachers College; the management of the schools of observation and practice; the selection and arrangement of materials for the curriculum; outlines of courses of study in the various subjects; the aims, methods and results of instruction in the various school grades; syllabi of collegiate courses, and such studies in the history and philosophy of education, school economy and the theory and practice of teaching as serve to explain the course of instruction and the methods pursued in the College and its schools. These studies will be printed and numbered separately, each one complete in itself, and issued bi-monthly, except July.

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	<i>The Organization and Administration of Teachers College</i> — JAMES E. RUSSELL
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	<i>Outline of Nature Study in the Horace Mann School, etc.</i> —ELIZABETH CARSS
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	<i>Domestic Science</i> —HELEN KINNE
	<i>Manual Training</i> —CHARLES R. RICHARDS

The RECORD will be devoted during the year 1901, as heretofore, to studies in the theory and practice of teaching. The following numbers are in preparation:

<i>Biology in the Horace Mann High School</i> —FRANCIS E. LLOYD and MAURICE A. BIGELOW
<i>Geography in the Horace Mann School</i> —RICHARD E. DODGE
<i>Child Study—Sources of Materials and Syllabi of College Courses</i> —EDWARD L. THORNDIKE
<i>Syllabi of Teachers College Courses on the Theory and Practice of Teaching</i> —FRANK M. McMURRY

The subscription price is one dollar per annum; single numbers twenty cents, and extra copies \$10 a hundred. All subscriptions begin with the current number. Address all communications to the Editor of Teachers College RECORD, Columbia University, New York City.

The College also issues the following publications:

Announcement of Extension Courses

Announcement of Summer Session

Announcement of the Horace Mann School

Circular descriptive of the courses in Domestic Art, Domestic Science and Hospital Economics

Circular descriptive of the courses in Fine Arts

Circular descriptive of the courses in Kindergarten

Circular descriptive of the courses in Manual Training.

Any of these publications will be sent on application to the Secretary.

### STUDENTS' CLUBS—LECTURES

The professional life of the College is represented also in its students' clubs. A Graduate Club, a Glee Club, a Kindergarten Club and an Art Club are organized and serve for both professional and social purposes. These clubs, together with the general student body, have been federated through a central Council to promote the educational and social ends of the College, and to secure coöperation in various lines of interest, including student self-government. In the course of the college year various lectures and recitals, open without charge to students and their friends, are given under the general auspices of this Council, before the different student organizations and the student public.

The following lectures have already been arranged for the current year:

Dr. Denman N. Ross—"Nature and Significance of Art Design."

Dr. Margaret K. Smith—"Status of the Woman Student in German Universities."

Mrs. Ida Benfy Judd—"Readings from Browning."

Rev. W. C. Curtiss—"Indian Basketry."

Dr. James E. Russell—"The Present Organization and Administration of the Teachers College Schools."

Professor S. T. Dutton—"The Future of the Horace Mann Schools."

Mr. Ernest F. Fenollosa—"Art Education in Japan and America."

Mr. Charles D. McIver—"Education in the South."

Professor Barrett Wendell—"Aspects of Colonial Life."

Mrs. M. C. Ripley—"Rugs: Their Significance and Art Value."

Mrs. Howard Taylor—"China Inland Mission."

Mrs. Anna Botsford Comstock—Nature Study in New York State.

President James H. Taylor—"Ideals in Education."

Principal C. E. Franklin—"Normal Training Schools in New York State."

Professor H. Morse Stephens—"Great Endowed Schools of England."

Dr. Robert P. Keep—"The Old New England Academy: Its Former Place in Secondary Education, and its Future Prospects."

Rev. Pascal Harrower—"Sunday School Work."

Dr. John G. Wight—"English in Secondary Schools."

Rev. Dr. George R. Van de Water—"Inspiration of the Bible."

Dr. Julius Sachs—"The Classics in Secondary Schools."

Professor Calvin Thomas—"Modern Languages in Secondary Schools."

Dr. Arthur Schultze—"Mathematics in Secondary Schools."

Rt. Rev. H. C. Potter—Address before Phillips Brooks Guild.

Hon. Miles O'Brien—"The Commercial High School."

Dr. Edward J. Goodwin—"The Elective System in Secondary Schools."

Dr. W. B. Gunnison—"The Selection of Teachers."

Dr. John Meigs—"Ideals of the Home School."

Dr. John T. Buchanan—"Administration of High Schools."

Principal J. G. Croswell—"The Private School."

Professor John M. Tyler—"Growth."

DIPLOMAS CONFERRED DURING  
1899-1900

HIGHER DIPLOMA

WILLIAM ALFRED ACKERMAN

Lafayette College, A.B., 1894; A.M., 1897

MARIANNA CATHARINE BROWN

Vassar College, A.B., 1893

EMMA KATE CARMAN

WILLIAM ISAAC CHAMBERLAIN

Rutgers College, A.B., 1882; A.M., 1886; Columbia  
University, Ph.D., 1899

GEORGE ALLEN HUBBELL

Antioch College, B.S., 1890; A.M., 1891

JOSEPH PERRY JACKSON

Oskaloosa College, A.B., 1877; A.M., 1880; Iowa State  
University, LL.B., 1879

MARY PHILIPPA JONES

Alabama State Normal School, 1878; Cook County  
Normal School, 1890

CLARA BARBARA KIRCHWEY

Albany Training School, 1887

GEORGE W. A. LUCKEY

Leland Stanford, Jr., University, A.B., 1894

HARRIET ADELAIDE LUDDINGTON

State Normal School, Westfield, Mass., 1881; Cook  
County Normal School, 1889

RUDOLPH REX REEDER

Illinois State Normal University, 1883

JOHN CREE TELFORD WORK

State Normal School, Indiana, Pa., B.E., 1890; M.E., 1892

HERBERT LEMUEL WILBUR

Amherst College, A.B., 1892

## SECONDARY DIPLOMA

NANCY SEMPLE ACHESON  
Pennsylvania College, B.L., 1898

AGNES LEONARD BENNETT  
Candidate for A.B., Barnard College, 1900

SARAH HELEN BOGART  
Wellesley College, B.A., 1899

MARY FRANCES BRACKEN  
Pittsburg Female College, A.B., 1892

ALICE GERTRUDE BRICKELMAIER  
Cornell University, B.S., 1899

ELIZABETH EGGLESTON BRYANT  
Candidate for A.B., Barnard College, 1900

MICHAEL MARKS DAVIS  
Candidate for A.B., Columbia University, 1900

MARY JOSEPHINE DUDLEY  
University of Kansas, B.A., 1897; A.M., 1898

MELVILLE JEFFERSON FRANCE  
Columbia University, A.B., 1900

LUCIA FESSENDEN GILBERT  
Smith College, B.L., 1897

MARY LOOCKERMAN GOLDSBOROUGH  
Barnard College, A.B., 1900

NELLIE PRISCILLA HEWINS  
Cornell University, B.S., 1898

MILDRED HUBBARD  
Candidate for A.B., Barnard College, 1900

FLORENCE HUTCHINSON  
Candidate for A.B., Barnard College, 1900

ESTHER KEAGEY  
Candidate for A.B., Barnard College, 1900

FLORENCE LESLIE KYTE  
Candidate for A.B., Barnard College, 1900

ERNST GUSTAV LEMCKE  
Columbia University, A.B., 1898

ERNEST ALLAN MILLER  
Cornell University, B.S., 1899

ABRAHAM ELIJAH NEUGROSCHL  
Candidate for A.B., Columbia University, 1900

THOMAS EDWARD O'BRIEN  
Candidate for A.B., Columbia University, 1900

LEILA MADGE PALMER  
Smith College, A.B., 1899

WILLIAM COMSTOCK PERRY  
University of Vermont, B.S., 1898

EMMA LOUISA REED  
Wesleyan University, Ph.B., 1899

EMMA DUSINBERRE SANFORD  
Candidate for A.B., Barnard College, 1900

CORA ARNOT SCOTT  
Candidate for A.B., Barnard College, 1900

ALEXANDER GODFREY SMITH  
Candidate for A.B., Columbia University, 1900

MARY ELLEN STEVENS  
Hiram College, B.S., 1889

HENRIETTA BISCOE WINGFIELD

AMELIA WOHLFARTH  
Candidate for A.B., Barnard College, 1899

JULIE WURZBURGER  
Candidate for A.B., Barnard College, 1900

## ELEMENTARY DIPLOMA

ANNAH PRENTICE BLOOD	SUE LIFE LA MONTE
CHARLES WOOD SITZER HALLOCK	GRACE MCKINSTRY
LULIE JONES	ANNIE STOUT WATERS

## KINDERGARTEN DIPLOMA

HELEN COE CLOWES	GENEVIEVE SIERER
MAY EVELYN HUGHES	MARY LOUISE WHEELER
ELVIRA NATHAN LYON	

**DOMESTIC ART DIPLOMA**

NELLIE CROOKS  
ALICE HOPKINS  
FANNIE ELIZABETH KACHLINE

ANNIE PENDLEBURY SIMMONS  
MARY IRIE WATSON

**DOMESTIC SCIENCE DIPLOMA**

HARRIET FOLGER  
FANNIE LEE HALL  
GRACE ELIZABETH JONES

LAURA BRAINARD WHITTEMORE  
ANNA MARGARET WHITE

**FINE ARTS DIPLOMA**

CHESHIRE LOWTON BOONE  
ELIZABETH DAVIS  
EUNICE DRENNAN  
ELIZABETH EMMA GARRABRANT  
ANNE DREW HALLOCK

OLIVE RENA HIMES  
MAUD JOSEPHINE MITCHELL  
MARY IRENE NILES  
LUCRETIA NASH THORBURN-ARTZ  
EDITH VERY

**MANUAL TRAINING DIPLOMA**

BESSIE LOVERING BARRIS  
HOWARD DRAKE BRUNDAGE  
MARGARET BENSON DILWORTH

MARIA PEREIRA MENDES  
JOHN LANE PHOENIX

**MANUAL TRAINING AND FINE ARTS DIPLOMA**

ANNA MARIE HAMMOND  
GRACE BIGELOW HOUSE

FLORENCE RANDOLPH SANDERS

## LIST OF FELLOWS AND SCHOLARS, 1900-1901

### Fellows

FRANK PUTERBAUGH BACHMAN, Subjects, *Education and Psychology*  
University of Chicago, A.B., 1896;  
University of Marburg, 1896-1897.

RUFUS CLARENCE BENTLEY, " *Education and Psychology*  
University of Nebraska, A.B., 1894;  
A.M., 1896.

EDWIN CORNELIUS BROOME, " *Education and English*  
Brown University, Ph.B., 1897; A.M.,  
1898.

JOHN WILLIAM HALL, " *Education and Geography*  
State Normal School, Illinois, 1890;  
University of Jena, 1892-1895.

### Manual Training Fellow

OSCAR LINCOLN McMURRY,  
Illinois State Normal University, 1879;  
University of Michigan, 1881-1882;  
Cornell University, 1885-1886.

### Scholars

MARY ESTHER BEATTY, Subjects, *Education and Domestic  
Science*  
Newton Normal College, 1890-1893;  
Iowa State College, B.L., 1898.

ESMOND B. BEARDSLEE, " *Education and History*  
Colgate University, A.B., 1897.

RUSSELL H. BELLOWES, " *Education*  
Union College, 1889-1891;  
State Normal College, Albany, N. Y.,  
1893.

MARION RAYMOND BROWN, " *Education and Botany*  
Wells College, A.B., 1898.

JANE BRODIE CARPENTER, " *Education and English*  
Mt. Holyoke College, B.L., 1897; A.B.,  
1898.

ERNEST BECKWITH KENT, " *Education, Psychology and  
Sociology*  
Iowa College, A.B., 1894.

HARRY MARTIN SHAFER, " *Education and Psychology*  
Harvard University, A.B., 1899; A.M.,  
1900.

WILLIAM WALTER SMITH, Subjects, *Education and Psychology*  
 Princeton University, A.B., 1889;  
 A.M., 1892;  
 Columbia University, M.D., 1895.

LOUIS FRANKLIN SNOW, " *Education and English*  
 Brown University, Ph.B., 1887;  
 Harvard University, A.B., 1889; A.M.,  
 1890.

### Hoadley Scholars

ELEANOR M. PHILLIPS,  
 Illinois State Normal University, 1896.

MAUD VALENTINE,  
 Illinois State Normal University, 1890.

### Low Scholars

JANE WHEELER BRUSH.

Alice Belden Coles,  
 Vassar College, A.B., 1899.

MARY CHEVES WEST.

MAUD L. BROWN CURTISS.

### Charlotte Louisa Williams Scholars

SUSANNE REBECCA MILLER,  
 University of Minnesota, 1898-1900.

HELEN MARIA TURNER,  
 State Normal School, Louisiana, 1878.

### Earl Scholar

DAVID SAMUEL SNEDDEN, Subjects, *Education, Psychology and*  
 Leland Stanford, Jr., University, A.B., *Sociology*  
 1897.

### Pierrepont Scholar

ANNE TOWNSEND BRIDGMAN.

### Pond Scholar

ANNE BUSH MACLEAR.

### Shackelford Scholar

SOPHIE YUDELSON.

### Tileston Scholar

ADA MARIA SKINNER.

## REGISTER OF STUDENTS

### CANDIDATES FOR A HIGHER DIPLOMA

Abbott, Mary.....(Mhtn) New York City  
Normal College, New York City, 1878.  
*Education.*

† Alger, Lewis Burton.....St. Joseph, Mich.  
Albion College, 1893-1896.  
University of Michigan, Ph.B., 1897.  
*Education, Geography.*

Appel, Frank John.....(Mhtn) New York City  
German-American Teachers Seminary, 1896.  
*Education, Psychology.*

\* Bachman, Frank Puterbaugh.....Mackinaw, Ill.  
University of Marburg, 1896-1897.  
University of Chicago, A.B., 1898.  
*Education, Psychology.*

Bacon, Pearl.....(R) New York City  
*Education.*

Bebout, Edwin.....Westwood, N. J.  
New Jersey State Normal School, 1894.  
*Education.*

Becker, Moses, Jr.....(Bklyn) New York City  
State Normal College, Albany, N. Y., 1880.  
New York University, Pd.D., 1893.  
*Education.*

Beller, Wilhemina Catharine.....(Mhtn) New York City  
Normal College, New York City, 1881.  
*Education.*

† Bennion, Milton.....Salt Lake City, Utah  
University of Utah, B.S., 1897.  
*Education, Philosophy, Psychology.*

\* Bently, Rufus Clarence.....San Rafael, Cal.  
University of Nebraska, A.B., 1894; A.M., 1896.  
*Education, Psychology.*

Best, Fannie Ellsler.....(R) New York City  
State Normal College, Albany, N. Y., 1877.  
*Education.*

\*Also a candidate for the Ph.D. degree.

†Also a candidate for the A.M. degree.

Bevier, Katherine.....(Mhtn) New York City  
 Normal College, New York City, 1876.  
*Education, English.*

Blood, Annah Prentice.....Pepperell, Mass.  
 State Normal School, Salem, Mass., 1881.  
 Teachers College, 1900.  
*Education, Biology, Geology.*

Bodler, John William Walton.....(Mhtn) New York City  
 State Normal School, Mansfield, Pa., M.E., 1890.  
 Lafayette College, Ph.B., 1896.  
 Buffalo Teachers College, 1897-1898.  
*Education.*

Boughton, Willis.....(Bklyn) New York City  
 University of Michigan, A.B., 1881.  
 Dickinson College, A.M., 1891.  
 Ohio University, Ph.D., 1900.  
*Education, English.*

\* Broome, Edwin Cornelius.....Seymour, Conn.  
 Brown University, B.P., 1897; A.M., 1898.  
*Education, English.*

† Brunn, Freda Marguerita.....(Bklyn) New York City  
 Teachers College, 1897.  
 Adelphi College, A.B., 1899.  
*Education.*

Burdick, Abner Hall.....(R) New York City  
 State Normal School, Ypsilante, Mich., 1874.  
 Mt. Union College, 1876-1877.  
*Education, English.*

\* Clark, Adelbert Thomas Selden.....(Mhtn) New York City  
 Union University, C.E., 1876; A.B., 1877; A.M., 1879.  
*Education, History, Literature.*

Clowes, Helen Coe.....Hempstead, N. Y.  
 Teachers College, 1900.  
*Education.*

\*Cottrell, John Boardman.....(Bklyn) New York City  
 Alfred University, A.B., 1893.  
 New York University, A.M., 1900.  
*Education.*

Crane, William Albert.....(R) New York City  
 State Normal School, Westfield, Mass., 1870-1872.  
*Education.*

Cullen, Winifred Terence.....(Bklyn) New York City  
 Liverpool Training College, 1883-1885.  
*Education.*

\*Also a candidate for the Ph.D. degree.

†Also a candidate for the A.M. degree.

Egbert, Katharine Wolcott..... Rosebank, N. J.  
 State Normal School, New Paltz, N. Y., 1895.  
*Education, English, Mathematics.*

† Emerson, Mary Josephine..... (Mhtn) New York City  
*Education.*

† Farrington, Frederic Ernest..... (Mhtn) New York City  
 Harvard University, A.B., 1894.  
*Education, Psychology.*

Foster, Carolyn Dean..... Rochester, N. Y.  
 St. Lawrence University, Ph.B., 1894.  
*Education.*

† Garritt, Albert Warren..... (Mhtn) New York City  
 College of the City of New York, B.S., 1890.  
*Education, Mathematics.*

Garrison, Anna Ringwood..... Chatham, N. Y.  
 State Normal College, Albany, N. Y., 1889.  
*Education.*

Goadby, Arthur..... (Mhtn) New York City  
 Harvard University, 1885-1886.  
*Education, English, Sociology.*

\* Hall, John William..... Greeley, Col.  
 State Normal School, Normal, Ill., 1890.  
 University of Jena, 1892-1895.  
*Education, Geography.*

Harrigan, James..... (R) New York City  
 St. Lawrence University, B.S., 1896.  
 State Normal School, Potsdam, N. Y., 1897.  
*Education, English.*

Harrison, Grace..... (R) New York City  
 State Normal College, Albany, N. Y., 1889.  
*Education.*

Hildreth, Helen Rebecca..... Lockport, N. Y.  
 State Normal School, Winona, Minn., 1893.  
 Teachers College, 1899.  
*Education, Manual Training, Biology.*

Hurd, Julia Malita..... (R) New York City  
*Education.*

† Jenks, Elijah, Jr..... (Br) New York City  
 College of the City of New York, B.S., 1889.  
*Education.*

\*Also a candidate for the Ph.D. degree.

†Also a candidate for the A.M. degree.

† Jenks, Paul Rockwell.....Concord, N. H.  
 Dartmouth College, A.B., 1894.  
*Education, Greek.*

Johnson, Euphemia.....Middletown, Conn.  
 Radcliffe College, 1891-1892.  
 University of Pennsylvania, 1898-1899.  
 Candidate for A.B., 1901.  
*Education, English, History.*

Kahn, Arabella.....(Mhtn) New York City  
 Normal College, New York City, 1885.  
*Education.*

\* Kaplan, Mordecai Menahem.....(Mhtn) New York City  
 College of the City of New York, A.B., 1900.  
*Education, Philosophy, Political Science.*

\* Kelly, Bernard Hetherington.....(Br) New York City  
 New York University, B.S., 1893.  
*Education.*

† Kent, Ernest Beckwith.....Indianapolis, Ind.  
 Atlanta University, 1886-1889.  
 Iowa College, A.B., 1894.  
*Education, Psychology, Manual Training.*

† Knox, Thomas Harry.....(Mhtn) New York City  
 College of the City of New York, B.S., 1888.  
*Education, Mechanics.*

Lambert, Marcus Bachman.....(Bklyn) New York City  
 Lafayette College, A.B., 1882.  
 Johns Hopkins University, 1884-1885.  
*Education.*

Lyon, Elvira Nathan.....(Mhtn) New York City  
 Teachers College, 1900.  
*Education.*

Mack, Mary S.....Denver, Col.  
 State Normal School, New Britain, Conn., 1882.  
*Education, Biology.*

Manny, Frank Addison.....(Mhtn) New York City  
 University of Michigan, A.B., 1893; A.M., 1896.  
 University of Chicago, 1896-1897.  
*Education.*

\* Marsh, Horace Wilmer.....(Bklyn) New York City  
 Lafayette College, A.B., 1889; A.M., 1893.  
*Education, Philosophy.*

† Martin, George Kempton.....(Mhtn) New York City  
 College of the City of New York, B.S., 1893.  
*Education.*

\*Also a candidate for the Ph.D. degree.

†Also a candidate for the A.M. degree.

Miller, Susanne Rebecca Marian.....Minneapolis, Minn.  
 Teachers Training School, Mansfield, O., 1891.  
 University of Minnesota, 1898-1900.  
*Education, English.*

Morey, James S.....(Bklyn) New York City  
 State Normal School, New Paltz, N. Y., 1889.  
*Education.*

† Morris, George.....(Bklyn) New York City  
 Rutgers College, B.S., 1889.  
*Education.*

\* Murray, William Smith.....Bath, N. Y.  
 Syracuse University, B.S., 1888; M.S., 1892.  
*Education, History, English.*

McAleer, Mary Frances. ....(Mhtn) New York City  
 Normal College, New York City, 1885.  
*Education, Geography.*

\* Nichols, Walter Hammond.....(Mhtn) New York City  
 University of Michigan, B.S., 1891.  
*Education, History.*

Norsworthy, Naomi. ....(Mhtn) New York City  
 State Normal School, Trenton, N. J., 1896.  
*Education, Psychology, Chemistry.*

Osincup, Katherine Leonette. ....(R) New York City  
 State Normal School, Oneonta, N. Y., 1899.  
*Education, English.*

Pardee, Sheldon John. ....(R) New York City  
 Michigan State Normal School, 1872.  
 Union Christian College, B.S., 1876; M.S., 1879; Ph.D., 1888.  
*Education.*

† Patri, Angelo.....(Mhtn) New York City  
 College of the City of New York, A.B., 1897.  
*Education.*

\* Pilgrim, Yancey Calhoun.....Kearney, N. J.  
 Lafayette College, Ph.B., 1889; M.S., 1892.  
*Education.*

† Pugliese, Anthony.....(Mhtn) New York City  
 College of the City of New York, A.B., 1897.  
*Education.*

† Rafferty, William B. ....(R) New York City  
 St. Lawrence University, A.B., 1890.  
*Education.*

\*Also a candidate for the Ph.D. degree.

†Also a candidate for the A.M. degree.

† Reynolds, James Joseph.....(Mhtn) New York City  
 College of the City of New York, B.S., 1893.  
 New York University, LL.B., 1897.  
*Education, Psychology.*

\* Richardson, Roy Spencer.....(Bklyn) New York City  
 Syracuse University, Ph.B., 1894; Ph.M., 1897.  
 Johns Hopkins University, 1894-1897.  
 Chicago University, 1898-1899.  
*Education.*

Schiller, Bianca.....(Q) New York City  
 State Normal School, Oswego, N. Y., 1895.  
*Education, Psychology, English.*

\* Shafer, Harry Martin.....Eureka, Ill.  
 Eureka College, B.S., 1887; M.S., 1890.  
 Harvard University, A.B., 1899; A.M., 1900.  
*Education, Psychology.*

† Shaw, Ira Dennison.....(Mhtn) New York City  
 State Normal School, Randolph, Va., 1890.  
 Oberlin College, A.B., 1898.  
*Education, English.*

Simons, Charles Frederick.....(R) New York City  
 State Normal School, Fredonia, N. Y., 1871-1874.  
*Education.*

\* Smith, William Walter.....(Mhtn) New York City  
 Princeton University, A.B., 1889; A.M., 1892.  
 General Theological Seminary, 1892.  
 Columbia University, M.D., 1895.  
*Education, Psychology.*

† Snedden, David Samuel.....Griffin, Cal.  
 St. Vincent College, A.B., 1890.  
 Leland Stanford, Jr., University, A.B., 1897.  
*Education, Psychology, Sociology.*

\* Snow, Louis Franklin.....Providence, R. I.  
 Brown University, Ph.B., 1887.  
 Harvard University, A.B., 1889; A.M., 1890.  
*Education, English.*

† Spaulding, Frank Benton.....(Bklyn) New York City  
 State Normal School, Potsdam, N. Y., 1887.  
 St. Lawrence University, B.S., 1895.  
*Education, Physics.*

† Springmeyer, Charles Edwin.....(Mhtn) New York City  
 College of the City of New York, A.B., 1897.  
*Education.*

\*Also a candidate for the Ph.D. degree.

†Also a candidate for the A.M. degree.

Stanton, Benjamin J. .... (R) New York City  
 State Normal College, Albany, N. Y., 1888.  
*Education, History.*

Sutliffe, Elisabeth .... (R) New York City  
 State Normal College, Albany, N. Y., Pd.B., 1896.  
*Education.*

† Swift, Fletcher Harper. .... (Bklyn) New York City  
 Dartmouth College, A.B., 1898.  
*Education.*

Terry, Jennie Viola .... (R) New York City  
 State Normal College, Albany, N. Y., 1888.  
*Education, English.*

† Tucker, Louise Emery .... (Bklyn) New York City  
 Adelphi College, A.B., 1900.  
*Education, Philosophy.*

Viertel, Samuel .... (Mhtn) New York City  
 College of the City of New York, B.S., 1898.  
*Education.*

† Wade, John Edgar. .... (Mhtn) New York City  
 College of the City of New York, B.S., 1897.  
*Education.*

Warren, Clara E. .... (R) New York City  
 State Normal College, Albany, N. Y., 1893.  
*Education, English, History.*

† Watson, Lake George. .... Richmond, Ind.  
 Earlham College, Ph.B., 1900.  
*Education, German.*

Wheeler, Mary Louise. .... Montclair, N. J.  
 Teachers College, 1900.  
*Education.*

Willard, Frank A. .... (Bklyn) New York City  
 Hamilton College, A.B., 1880.  
*Education.*

Yates, Albertis Austin. .... (R) New York City  
*Education, History.*

† Zollinhofer, Sophie. .... (Bklyn) New York City  
 Teachers College, 1897.  
 Adelphi College, A.B., 1899.  
*Education.*

†Also a candidate for the A.M. degree.

## CANDIDATES FOR A SECONDARY DIPLOMA

\* Abelson, Paul.....(Mhtn) New York City  
 College of the City of New York, A.B., 1899.  
*History.*

Allen, Elizabeth.....(Bklyn) New York City  
 Candidate for A.B., 1902.  
*Mathematics.*

† Angell, Nina.....Ithaca, N. Y.  
 Cornell University, A.B., 1900.  
*Greek, Latin.*

† Ayres, Mary Stevens.....(Bklyn) New York City  
 Leland Stanford, Jr., University, 1893-1894.  
 Wellesley College, A.B., 1900.  
*English.*

† Baldwin, Arthur Pond.....(Bklyn) New York City  
 College of the City of New York, A.B., 1876.

† Beardslee, Esmond B.....Little Meadows, Pa.  
 Colgate University, A.B., 1897.  
*History.*

Bentley, Ellen Hart.....(Mhtn) New York City  
 University of Nebraska, A.B., 1896.  
*History.*

Berry, Edith.....East Orange, N. J.  
 Candidate for A.B., 1901.  
*Mathematics.*

† Blair, Carrie Winifred.....Wolfville, Nova Scotia  
 Acadia University, A.B., 1898.  
*English.*

\* Blodgett, Frederick Harvey.....(Br) New York City  
 Rutgers College, B.S., 1897; M.S., 1899.  
*Biology.*

† Brown, Marion Raymond.....Oxford, N. Y.  
 Wells College, A.B., 1898.  
*Biology.*

Budd, Mary Hunt.....Chester, N. J.  
 Candidate for A.B., 1902.  
*Mathematics.*

Buffington, Margaret.....Millburn, N. J.  
 Candidate for A.B., 1901.  
*German, Latin.*

† Burr, Marjorie.....Williamstown, Mass.  
 Vassar College, A.B., 1899.  
*English, History.*

\*Also a candidate for the Ph.D. degree.

†Also a candidate for the A.M. degree.

Carhart, Elizabeth Merle.....Peekskill-on-Hudson, N. Y.  
 Candidate for A.B., 1901.  
*History.*

† Carpenter, Jane Brodie.....Andover, Mass.  
 Mt. Holyoke College, B.L., 1897; A.B., 1898.  
*English.*

† Casamajor, Alice.....(Bklyn) New York City  
 Adelphi College, A.B., 1899.  
*History.*

Chapin, Edna Cara.....Mount Vernon, N. Y.  
 Candidate for A.B., 1902.  
*Physical Science.*

Cooper, Isabella Mitchell.....Troy, N. Y.  
 Teachers College, 1899.  
 Candidate for A.B., 1901.  
*English, History.*

Cutting, Harriet Elizabeth.....Yonkers, N. Y.  
 Candidate for A.B., 1901.  
*Greek.*

† Dawson, Alice Belle.....(Bklyn) New York City  
 Oxford College, A.B., 1891.  
*Latin.*

† Dixon, Sidney Harry.....Yonkers, N. Y.  
 Columbia University, A.B., 1900.  
*Latin.*

† Dodd, Loring Holmes.....(Mhtn) New York City  
 Dartmouth College, A.B., 1900.  
*English.*

Earle, Ruth.....(Mhtn) New York City  
 Candidate for A.B., 1902.

Elliman, Kenneth Benbow.....(Q) New York City  
 Candidate for A.B., 1901.  
*English.*

Elting, Mabel.....New Paltz, N. Y.  
 State Normal School, New Paltz, N. Y., 1894.  
 Candidate for A.B., 1901.  
*English, History.*

Ferry, Alice Medora.....Mount Vernon, N. Y.  
 Columbia University, A.B., 1897.  
*Greek, Mathematics.*

† Fish, Lucia Hester.....Oakland, Cal.  
 University of California, A.B., 1899.  
*Greek, Latin.*

†Also a candidate for the A.M. degree.

Forbes, Charles Savage.....(Mhtn) New York City  
 Candidate for A.B., 1901.  
*Mathematics.*

† Gerken, Walter Diedrich.....Jersey City, N. J.  
 Cornell University, B.S., 1899.  
*History.*

† Gould, Nelle Julia.....Bayonne, N. J.  
 Smith College, A.B., 1898.  
*English, Latin.*

† Green, Mary Wolcott.....(R) New York City  
 Syracuse University, A.B., 1895.  
*Latin.*

Hamilton, Elizabeth.....(Mhtn) New York City  
 Syracuse University, 1897-1900.  
 Candidate for A.B., 1901.  
*History.*

Heuser, Frederick William Justus.....(Bklyn) New York City  
 Candidate for A.B., 1901.  
*German.*

Hollis, Ida Minerva.....Hornellsville, N. Y.  
 Candidate for B.S., 1901.  
*English, History.*

† Horst, Mabel Louise.....Newark, N. J.  
 Vassar College, A.B., 1900.  
*English.*

† Johnson, Margaret Edith.....(Bklyn) New York City  
 Adelphi College, A.B., 1899.  
*English, History.*

Kellogg, Olive Catharine.....(Mhtn) New York City  
 Candidate for A.B., 1901.  
*English.*

Kimball, Viola Louise.....Greenwich, Conn.  
 Candidate for A.B., 1902.

Kraker, Rose Lois.....Rochester, N. Y.  
 Candidate for A.B., 1901.  
*English, German.*

† Lovett, Mary.....Redbank, N. J.  
 Vassar College, A.B., 1900.  
*Biology.*

Lynch, John Kenny.....(Mhtn) New York City  
 Candidate for A.B., 1901.  
*German.*

†Also a candidate for the A.M. degree.

†Lyon, Amy Lulu.....(Bklyn) New York City  
 St. Lawrence University, A.B., 1899.  
*History, Mathematics.*

†McConkey, Henry Alexander.....(Mhtn) New York City  
 Princeton University, A.B., 1890.  
 Union Theological Seminary, 1899.  
*Greek.*

McKim, Christina Louise.....Yonkers, N. Y.  
 Candidate for A.B., 1901.  
*Mathematics.*

McLeod, Leila Durant.....(Bklyn) New York City  
 Vassar College, A.B., 1899.  
*English.*

†Mason, Mabel Kincheon.....(Mhtn) New York City  
 University of Toronto, A.B., 1898.  
*French, German.*

Mattice, Harold Allison.....(Mhtn) New York City  
 Candidate for A.B., 1901.  
*Greek, Latin.*

Meigs, Katharine Hedges.....Orange, N. J.  
 Smith College, A.B., 1891.  
*Physical Science.*

Meyer, John L.....Annville, Pa.  
 Lebanon Valley College, A.B., 1893; A.M., 1896.  
*Latin.*

Moody, Ethel Maria.....East Northfield, Mass.  
 Wellesley College, A.B., 1899.  
*Mathematics.*

Morrison, Mary Rathborn.....White Plains, N. Y.  
 Wellesley College, 1878-1882.  
 Candidate for A.B., 1901.  
*English, History.*

†Mourer, Carrie Louise.....Westminster, Md.  
 Western Maryland College, A.B., 1887.  
*Geography.*

Pegram, Robert Bruce.....(Mhtn) New York City  
 Candidate for A.B., 1901.  
*English.*

Pollock, May Hinton.....(Mhtn) New York City  
 Normal College, New York City, 1886-1890.  
 Columbia University, A.B., 1896.  
*Latin.*

†Also a candidate for the A.M. degree.

Pomeroy, John Norton..... San Francisco, Cal.  
 Yale University, A.B., 1887; A.M., 1889.  
 Columbia University, 1888-1890.  
 University of California, LL.B., 1891.  
*Greek.*

† Raiman, Robert Insall..... (Bklyn) New York City  
 Columbia University, A.B., 1900.  
*English.*

Rennert, Rosina Julia..... (Mhtn) New York City  
 Normal College, New York City, A.B., 1897.  
 Candidate for A.B., 1901.  
*Biology.*

Ross, Herbert Weed..... Newark, N. J.  
 Candidate for A.B., 1901.  
*English.*

Schuyler, Sarah Edwards..... Plainfield, N. J.  
 Candidate for A.B., 1901.  
*Latin.*

Seibert, Jeannette Rowland..... (Bklyn) New York City  
 Candidate for A.B., 1902.

Seward, Annie Leddell..... East Orange, N. J.  
 Candidate for A.B., 1902.  
*Mathematics.*

Studdiford, Jannetta Gordon..... Lambertville, N. J.  
 Bryn Mawr College, 1895-1896.  
 Candidate for A.B., 1901.  
*English.*

† Taber, Mary Alice..... Mount Vernon, N. Y.  
 Vassar College, A.B., 1898.  
*Physical Science.*

Talcott, Elizabeth Hannah..... Elmwood, Conn.  
 Smith College, A.B., 1885.

† Watt, Martha Wilber..... (Mhtn) New York City  
 Brown University, Ph.B., 1900.  
*English, Mathematics.*

Wendell, May Godfrey..... Bridgeport, Conn.  
 Candidate for A.B., 1901.  
*Latin.*

Wendt, Cordelia..... Larchmont, N. Y.  
 Candidate for A.B., 1901.  
*Greek.*

\* Zeiger, Franklin..... Montclair, N. J.  
 Columbia University, A.B., 1898; A.M., 1900.  
*Greek, Latin.*

\*Also a candidate for the Ph.D. degree.

†Also a candidate for the A.M. degree.

## CANDIDATES FOR THE ELEMENTARY DIPLOMA

In the following lists, the class to which each student belongs is indicated by the figure in parentheses following the name.

Atwood, Theodora (2).....	Albany, N. Y.
Baer, Dena (2).....	(Mhtn) New York City
Barrett, Katherine Ceceilia (1).....	Fishkill-on-Hudson, N. Y.
Barwick, Mary Jerome (1).....	Chicago, Ill.
	Cook County Normal School, 1888.
Bason, Ida E. (1).....	Sayville, N. Y.
	State Normal School, Jamaica, N. Y., 1900.
Bedell, Helen Louisa (2).....	Montclair, N. J.
	Teachers College, 1896.
Bellows, Russell Heacock (2).....	Fort Plain, N. Y.
	Union College, 1889-1891.
	State Normal College, Albany, N. Y., 1893.
Bennet, Sarah (2).....	(Bklyn) New York City
Berwald, Elizabeth Sophie (2).....	Bradford, Pa.
Blake, Marion (1).....	Jersey City, N. J.
Bowdish, Lewis F. (2).....	(Q) New York City
	Candidate for A.B., 1901.
Bridgman, Anne Townsend (1).....	(Mhtn) New York City
Brinkerhoff, Emily Vanderbilt (2).....	Mount Vernon, N. Y.
Brown, Sarah Jennie (1).....	(Bklyn) New York City
Byrne, Julia (1).....	(Mhtn) New York City
Cazin, Adele (1).....	Hoboken, N. J.
	State Normal School, Trenton, N. J., 1896.
Clark, Ada Ranney (2).....	Cresskill, N. J.
Clark, Louise (1).....	Three Rivers, Mich.
	Michigan State Normal College, 1898.
Close, Elsie (2).....	Dunmore, Pa.
	Teachers College, 1894.
Cole, Blanche Lillian (2).....	(Mhtn) New York City
Corson, Grace Edith (2).....	Detroit, Mich.
Covert, Alice Foote (1).....	Farmer, N. Y.
	State Normal School, Oneonta, N. Y., 1897.
Curtiss, Elizabeth (1).....	(Mhtn) New York City
	State Normal School, Geneseo, N. Y., 1896.
Davis, Margaret Cameron (1).....	Avalon, Pa.
	State Normal School, Indiana, Pa., 1883.
Degen, Catherine Anna (2).....	Clifton Park, N. J.
	State Normal School, Geneseo, N. Y., 1891.
Delaney, Harmie Alice (1).....	Gloversville, N. Y.
Devlin, Matthew (2).....	Maspeth, N. Y.
	St. Francis College, B.S., 1897.

Dowd, Eleanor M. (1).....	(Q) New York City
State Normal School, Oswego, N. Y., 1890.	
Du Bois, Emily R. (1).....	Douglaston, N. Y.
Eastman, Mary Louise (1).....	(Bklyn) New York City
State Normal School, Cortland, N. Y., 1892.	
Elliott, Ernest Harry (2).....	(Bklyn) New York City
University of Minnesota, 1896-1898.	
Fairchild, Helen Adelaide (1).....	Forestville, Conn.
Oberlin College, 1898-1900.	
Fay, Mamie (1).....	(Q) New York City
Ferris, Mary Danforth (1).....	Mount Vernon, N. Y.
Normal College, New York City, 1890.	
Fielder, Louise (2).....	(Mhtn) New York City
Forrest, Gertrude (1).....	(Bklyn) New York City
Frost, Laura Redington (2).....	Meriden, Conn.
Graves, Anna Melissa (1).....	Pikesville, Md.
Womans College, Baltimore, 1899-1900.	
Hammond, Anna Bingham (1).....	Amenia, N. Y.
State Normal School, New Paltz, N. Y., 1890.	
Hand, May Stanley (1).....	(Q) New York City
Hastings, Blanche Mabel (1).....	Palmer, Mass.
Vassar College, 1895-1896; 1899-1900.	
Henderson, Marion Livingston (1).....	Plainfield, N. J.
Hess, Mary Irene (1).....	(Mhtn) New York City
Hughes, Margaret Maria (1).....	(Mhtn) New York City
Normal College, New York City, 1876.	
Jones, Frances Fahnestock (2).....	South Bethlehem, Pa.
Ikeda, Goroku (1).....	Japan
Yamanaski Normal School, 1897.	
Irving, Sylvia (1).....	(Bklyn) New York City
Kennedy, Anna (1).....	Redbank, N. J.
State Normal School, Trenton, N. J., 1887.	
King, Ida J. (1).....	(Bklyn) New York City
State Normal School, Oswego, N. Y., 1876.	
Le Fevre, George (2).....	Linlithgo, N. J.
Rutgers College, A.B., 1878.	
New Brunswick Theological Seminary, A.M., 1881.	
Levens, Belle (2).....	Albert Lea, Minn.
State Normal School, Mankato, Minn., 1885.	
Lever, Lily Carlotta Vendell (1).....	(Bklyn) New York City
Mabrey, Gertrude Estelle (1).....	Norwich, Conn.
State Normal School, Norwich, Conn., 1896.	
Magaleäes, Helen Watterson (1).....	(Bklyn) New York City
Martin, Julia (1).....	Manchester, Mich.
Michigan State Normal College, 1897.	

Martin, May Belle Virginia (1).....	Springfield, Mass.
Merriam, Edith (2).....	(Mhtn) New York City
Teachers College, 1893.	
Miller, Alice Etta (2).....	Plainfield, N. J.
Mitchell, Julia Rebecca (2).....	Hoboken, N. J.
MacLear, Anne Bush (2).....	Wilmington, Del.
McRae, Janet (2).....	Waco, Texas
Nash, Williametta Orton (1).....	Norwalk, Conn.
University of Michigan, 1892-1893.	
Neer, Mary Louisa (1).....	Park Ridge, N. J.
State Normal School, Trenton, N. J., 1893.	
O'Geran, Annie Susan (1).....	Oswego, N. Y.
State Normal School, Oswego, N. Y., 1890.	
Patterson, Jennie Lynn (1).....	(Bklyn) New York City
Pelton, Edith Chester (1) .....	Hartford, Conn.
Phillips, Eleanor M. (2).....	Normal, Ill.
Illinois State Normal University, 1895.	
Colorado State Normal School, M.Ped., 1898.	
Pollock, Rosalie (2).....	Fargo, N. Dakota
Pounding, Eloise (1).....	(R) New York City
State Normal School, Geneseo, N. Y., 1894.	
Powers, Frances Mary (1).....	(Mhtn) New York City
Normal College, New York City, 1879.	
Record, Carrie Livermore (1).....	Forestville, N. Y.
State Normal School, Fredonia, N. Y., 1896.	
Reeder, Bertha Catherine (1).....	(Q) New York City
State Normal School, Oneonta, N. Y., 1897.	
Riley, Marietta (1).....	(Bklyn) New York City
Schwabe, Ida (1).....	(Mhtn) New York City
Scribner, Arabella (1).....	(Mhtn) New York City
Rutgers Female College, L.B., 1876.	
Skinner, Ada Maria (2).....	Columbus, Ohio
Columbus Normal School, 1889.	
Smith, Caroline Harriet (1).....	Blodgett Mills, N. Y.
State Normal School, Cortland, N. Y., 1897.	
Smith, Marie Louise (1).....	(Mhtn) New York City
Normal College, New York City, A.B., 1900.	
Staber, Maud Johanna (2).....	(Bklyn) New York City
Staley, Jessie Edith (2).....	Lansingburgh, N. Y.
Troy Training School, 1898.	
Tattershall, Fanny (2).....	White Haven, Pa.
Tener, Elizabeth (1).....	(Mhtn) New York City
Tibbits, Marietta J. (1).....	(Mhtn) New York City
Normal College, New York City, 1880.	
Tomlinson, Cora (1).....	Plainfield, N. J.
Valentine, Maud (2).....	Lanark, Ill.
Illinois State Normal University, 1890.	

Van Pelt, Sarah Elizabeth (2).....	Morristown, N. J.
Wallace, Margaret L. (1).....	McMinnville, Tenn.
	Cumberland Female College, A.M., 1884.
Wells, Herman Jay (2).....	(Bklyn) New York City
	Williams College, B.A., 1887.
Wettlin, Emma Louisa (1).....	Newark, N. J.
White, Jessie Campbell (2).....	Bradford, Pa.
Williams, Susan Elizabeth (1).....	(Mhtn) New York City
	Normal College, New York City, 1889.
Wright, Eva (1).....	(Q) New York City
	State Normal School, Oneonta, N. Y., 1896.
Wyckoff, Harriet Elvira (1).....	Cuba, N. Y.
	State Normal School, Geneseo, N. Y., 1887.
Yudelson, Sophie (1).....	(Mhtn) New York City

### CANDIDATES FOR THE KINDERGARTEN DIPLOMA

Allen, Bird (1).....	Weehawken, N. J.
	State Normal School, New Paltz, N. Y., 1890.
Austin, Margaret Rebecca (1).....	Canton, N. Y.
	St. Lawrence University, Ph.B., 1900.
Bower, Mary Lydia (1).....	Salisbury, Conn.
	State Normal School, New Britain, Conn., 1894-1896.
Brush, Jane Wheeler (2).....	Geneva, N. Y.
Carey, Henrietta Woodworth (1).....	Norwich, Conn.
	Smith College, 1896-1898.
Colburn, Mina B. (2).....	Jamestown, N. Y.
	Chicago Free Kindergarten Association, 1893.
Coles, Alice Belden (2).....	Kingston, N. Y.
	Vassar College, A.B., 1899.
Curtiss, Maud L. Brown (1).....	New Britain, Conn.
	State Normal School, New Britain, Conn., 1891.
Hallowell, Helen (1).....	(Mhtn) New York City
Leavenworth, Elizabeth (2).....	Passaic, N. J.
	State Normal School, Oswego, N. Y., 1892.
Leopold, Cora Rose (1).....	(Mhtn) New York City
Morey, Susan B. (1).....	(Q) New York City
Palmer, Florence Lila (2).....	Tenafly, N. J.
Parsons, Belle (2).....	Washington, D. C.
	Wellesley College, 1896-1898.
Wessel, Clara G. (1).....	New Britain, Conn.
	State Normal School, New Britain, Conn., 1892.
West, Mary Cheves (2).....	Asheville, N. C.
	State Normal College, North Carolina, 1897.
Williams, Bessie Potter (2).....	(Bklyn) New York City
Worden, Alice Jane (2).....	Paterson, N. J.
	State Normal School, Paterson, N. J., 1899.

## CANDIDATES FOR THE DOMESTIC ART DIPLOMA

Allen, Mary E. (1).....	Ansonia, Conn.
State Normal School, New Britain, Conn., 1888.	
Freed, Rose (1).....	(Mhtn) New York City
Noble, Helen Gray (2).....	Jersey City, N. J.
Palmer, Adelaide Root (2).....	(Mhtn) New York City
Palmer, Sarah Danta (1).....	(Mhtn) New York City
Sage, Elizabeth (1).....	(Mhtn) New York City
Stiasny, Florence Frances (1).....	(Mhtn) New York City

## CANDIDATES FOR THE DOMESTIC SCIENCE DIPLOMA

Beatty, Esther (2).....	Newton, Ia.
Iowa State College, B.L., 1898.	
Blandford, Mary (1).....	Los Angeles, Cal.
Bruckman, Rose (1).....	St. Louis, Mo.
Campbell, Josephine (1).....	(Mhtn) New York City
Clark, Matie Pearl (2).....	Kelly, N. Mexico
Leland Stanford, Jr., University, 1896-1898.	
Dulon, Mabel Richards (2).....	(Mhtn) New York City
Dutcher, Mary (1).....	(Mhtn) New York City
Eisenhardt, Carrie (1).....	St. Louis, Mo.
Farquhar, Amélie Margaret (1).....	Detroit, Mich.
Geer, Elene Ellsworth (2).....	Hartford, Conn.
Gower, Mary Love (1).....	Los Angeles, Cal.
Griffith, Miriam (1).....	(Mhtn) New York City
Hazzard, Jessica Charles (1).....	Whittier, Cal.
State Normal School, San José, Cal., 1891.	
Hildenbrandt, Jennie C. (1).....	St. Louis, Mo.
Hyams, Sarah (2).....	(Mhtn) New York City
Normal College, New York City, 1882-1884.	
Joralemon, Belle Hedden (1).....	Orange, N. J.
Mayer, Hattie (1).....	(Mhtn) New York City
Miller, Sarah (2).....	Minneapolis, Minn.
University of Minnesota, 1890-1893.	
Perham, Bertha Ellen (1).....	Lestershire, N. Y.
State Normal School, Johnson, Vt., 1888.	
Pincomb, Mary J. (2).....	Merriam, Kan.
Kansas Agricultural College, B.S., 1896.	
Rich, Jessie Pinning (1).....	Oshkosh, Wis.
State Normal School, Oshkosh, Wis., 1897.	

Schmelz, Irma Helen (2).....	(Mhtn) New York City
Simmons, Annie Pendlebury (1).....	Yonkers, N. Y.
Teachers College, 1900.	
Strong, Eunice Eliza (1).....	Colchester, Conn.
Tuttle, Gertrude (2).....	Hornellsville, N. Y.
Vassar College, 1896-1897; 1898-1899.	
Tuttle, Mary Louise (2).....	Waterbury, Conn.
Wallace, Mary Leighton (1).....	St. Louis, Mo.
Way, Charlotte M. (1).....	Atlantic City, N. J.
Swarthmore College, B.S., 1888.	
Leland Stanford, Jr., University, A.B., 1892.	
Westgate, Helen Elizabeth (2).....	Middletown, Conn.
Wesleyan University, 1896-1899.	
Wilson, Lillie Marian (1).....	Denmark, Me.

### STUDENTS IN THE COURSE IN HOSPITAL ECONOMICS

Beatty, Elizabeth Maxwell.....	Ivy Rock, Pa.
Pennsylvania Hospital Training School, 1900.	
Greiner, Kate Anne.....	Buffalo, N. Y.
Boston Training School, 1887.	
Hart, Blanche Page.....	La Crosse, Wis.
Wisconsin Training School, 1896.	
Palmer, Ida Russell.....	Rochester, N. Y.
Newport Hospital Training School, 1891.	
Sullivan, Mary Victoria.....	Baltimore, Md.
Johns Hopkins Hospital Training School, 1900.	
Underhill, Eleanor Alice.....	Port Richmond, N. Y.
General Memorial Hospital Training School, 1899.	
Young, Anna R.....	South Berwick, Me.
New York Hospital Training School, 1892.	

### CANDIDATES FOR THE FINE ARTS DIPLOMA

Comegys, Glennie Dexter (2).....	Asbury Park, N. J.
Ford, Florence Etna (1).....	Philadelphia, Pa.
University of Wooster, 1884-1886.	
Foster, Ethel Elizabeth (2).....	Washington, D. C.
Washington Normal School, 1893.	
Friedman, Ella (1).....	(Mhtn) New York City
Kooser, Mary Forward (2).....	Somerset, Pa.
Loftus, Martha Mary (1).....	North Adams, Mass.
McCreary, Jean Cloud (1).....	Shippensburg, Pa.
Cumberland Valley College, B.E., 1899.	

Monteith, Caroline (1).....	(Mhtn) New York City
Nicholas, Phoebe Condit (2).....	St. Paul, Minn.
Nordell, Anna Euphrosyne (1).....	Stamford, Conn.
Owen, Bessie Margia (1).....	Norwich, N. Y.
Preble, Grace Rosamond (1).....	(Mhtn) New York City
	Rutgers Female College, A.B., 1876.
Rorty, Marion Helen (1).....	Middletown, N. Y.
Stangland, Jessie Cary (1).....	(Mhtn) New York City
Steven, Mabel Jessie (1).....	(Mhtn) New York City
Taylor, Marguerite Henrietta (2).....	Canastota, N. Y.
Turner, Helen Maria (2).....	(Mhtn) New York City
	State Normal School, New Orleans, La., 1878.
Whittemore, Amy Pomeroy (2).....	(Mhtn) New York City
Wilkinson, Edith Lake (1).....	Wheeling, W. Va.
Wilkinson, Louise (1).....	Newburgh, N. Y.
Woodruff, John Kellogg (1).....	Bridgeport, Conn.
Worth, Addie Josephine (2).....	Geneva, N. Y.
Young, Elizabeth (2).....	(Mhtn) New York City

## CANDIDATES FOR THE MANUAL TRAINING DIPLOMA

Bacon, Louis Alex. (2).....	Elmira, N. Y.
Barlow, Helen Sanders (2).....	(Mhtn) New York City
Battey, Lewis Birch (1).....	Fall River, Mass.
Bertholf, Katherine Iliff (1).....	Nyack, N. Y.
Blanchard, Ada (1).....	Los Angeles, Cal.
Bookwater, Mary Linton (2).....	Minneapolis, Minn.
Buxton, George Frederick (1).....	Newark, N. J.
Colton, Henry Ewing (1).....	Exeter, N. H.
Gausmann, Anna Bogert (2).....	Leonia, N. J.
Goodrich, Harriet M. (1).....	Grand Rapids, Mich.
University of Chicago, Ill., 1896-1897.	
Howe, Edwin J. (1).....	Clarence, N. Y.
State Normal School, Geneseo, N. Y., 1889.	
Jacobs, Charles Louis (1).....	(Mhtn) New York City
Laubach, Merit Lees (2).....	Fairmount Springs, Pa.
State Normal School, Bloomsburg, Pa., M.E., 1895.	
Lewis, George Lyman (2).....	Syracuse, N. Y.
State Normal School, Oswego, N. Y., 1899.	
Linville, Lucy Anna (2).....	Swarthmore, Pa.
McMurtry, Oscar Lincoln (2).....	Chicago, Ill.
Illinois State Normal University, 1879.	
University of Michigan, 1881-1882.	
Cornell University, 1885-1886.	
Pierson, Elizabeth Bradford (1).....	Orange, N. J.
Saam, Caroline Elsa (2).....	Philadelphia, Pa.
State Normal School, Philadelphia, Pa., 1899.	

Sargent, William Amos (2).....	Lawrence, Mass.
† Staber, Ottile Pamela (1).....	(Bklyn) New York City
St. John, Guy B. (1).....	Winona, Minn.
Thomson, John (1).....	Jersey City, N. J.
Vincent, Grace (1).....	Somerville, N. J.
State Normal School, Trenton, N. J., 1893.	
Wilburn, Emma Pitman (2).....	Griffin, Ga.
Capital Female College, 1893.	
* Wilmarth, Elmer Humphrey (2).....	Middlebury, Vermont
Worcester Polytechnical Institute, B.S., 1897.	

## STUDENTS IN THE COLLEGIATE COURSE

Asher, Leah (1).....	Worcester, Mass.
Baker, Helen Julia (2).....	(Mhtn) New York City
Barrett, Daisy Vivian (1).....	Bennington, N. Y.
Beegle, Mary Porter (2).....	Ocean Grove, N. J.
Behr, Elsa (2).....	(Bklyn) New York City
Blackford, Gay Robertson (2).....	East Orange, N. J.
Brooker, Janet Harriet (1).....	Newburgh, N. Y.
Brown, Mary Porterfield (1).....	(Mhtn) New York City
Budington, Ethel Helena (1).....	Leyden, Mass.
Butler, Florence Louise (1).....	Orange, N. J.
Carpenter, Lulu Jane (1).....	Port Chester, N. Y.
Clearman, Barbara Wallis (1).....	(Mhtn) New York City
Closs, Rachael Evaline (2).....	Rose, N. Y.
Cruikshank, Laura Selma (2).....	(Bklyn) New York City
Davidson, Florence Amy (1).....	Dobbs Ferry, N. Y.
de Guise, Edith Emilie (1).....	(Mhtn) New York City
Dodd, Matilda Gordon (2).....	Newark, N. J.
Duffy, Lillian R. (2).....	(Bklyn) New York City.
Gomez, Mildred (1).....	(Mhtn) New York City
Gray, L. Carmita (2).....	Fort Plain, N. Y.
Groser, Faith Menzette (1).....	White Plains, N. Y.
Hanson, Sarah Reed (1).....	(Mhtn) New York City
Hubbard, May Boden (1).....	Bradford, Pa.
Jenkins, Grace Elsie (2).....	Mount Vernon, N. Y.
Keil, Caroline Elizabeth (1).....	(Mhtn) New York City
Kydd, Ida Elizabeth (2).....	(Mhtn) New York City
Lachmund, Laura Mathilda (1).....	Tappan, N. Y.
Lenehan, Elizabeth (2).....	Arverne, N. Y.
London, Jeanette Fanny (2).....	(Mhtn) New York City
Lovell, Helen (2).....	Plainfield, N. J.

\* Also a candidate for the Ph.D. degree.

† Also a candidate for the Fine Arts Diploma.

McKeighan, Elinor M. (2).....	St. Louis, Mo.
Merrill, Susan Bliss (2).....	Lexington, Mich.
Mulligan, Frances T. (1).....	(Q) New York City
Munckwitz, Winifred (1).....	(Mhtn) New York City
Odencrantz, Tulla Caroline (1).....	Houston, Texas
Parkhurst, Jessie Estelle (2).....	Mount Vernon, N. Y.
Parrott, Alice Burrows (1).....	Elizabeth, N. J.
Plumb, Clara Charlotte (2).....	Elizabeth, N. J.
Potter, Ella Hatch (2).....	Geneva, N. Y.
Reid, Florence Elisabeth (2).....	Jersey City, N. J.
Reppenhagen, Leila (1).....	Highland Falls, N. Y.
Roberts, Helen E. (2).....	Mount Vernon, N. Y.
Roe, Estelle (2).....	Branchville, N. J.
Rogers, Sarah Ann Eliza (2).....	(Bklyn) New York City
Sanford, May Thomas (2).....	(Mhtn) New York City
Steele, Minnie Louise (1).....	(Mhtn) New York City
Stevens, Harriet Lillian (1).....	Elbridge, N. Y.
Stryker, Adelaide Beverly (1).....	White Plains, N. Y.
Toepp, Lawrence A. (1).....	(R) New York City
Trube, Jessie Maud (1).....	Hastings-on-Hudson, N. Y.
Vaughan, Marion Moulton (2).....	(Q) New York City
Vinson, Byrd (2).....	(Mhtn) New York City
Westfall, Mabel Josephine (1).....	Mount Vernon, N. Y.
White, Charlotte (2).....	Orange, N. J.
Wilcox, Bessie Throop (2).....	Rochester, N. Y.
Winward, Carolyn Melissa (1).....	Fall River, Mass.
Wyant, Alice May (2).....	Elizabeth, N. J.

## STUDENTS NOT CANDIDATES FOR A DIPLOMA

## Special Students

The courses pursued are indicated in parentheses, abbreviated as follows :

(K.) Kindergarten	(E.) English
(D.A.) Domestic Art	(G.) Geography
(D.S.) Domestic Science	(H.) History
(F.A.) Fine Arts	(M.) Mathematics
(M.T.) Manual Training	(S.) Physical Science
(Ed.) Education	(Psy.) Psychology
(B.) Biology	(P.T.) Physical Training

Ach, Isidore L. (Ed.).....	Jersey City, N. J.
Alexander, Sarah Ann (E.).....	(Mhtn) New York City
State Normal School, Albany, N. Y., 1872.	
Appleby, Alfred John (Ed.).....	(Mhtn) New York City

Atkinson, Annie Madeline (Ed.)	(Mhtn) New York City
Axtell, Florence Josephine (H.)	Deposit, N. Y.
Banwell, Henrietta Maria (Ed., H.)	(Mhtn) New York City
Behrens, Sophia M. (F.A.)	(Br) New York City
Bergamini, Rachael (E.)	(Mhtn) New York City
Bonnell, Margaret Josephine (S.)	Newark, N. J.
Bradlin, Selina Fenwick (Ed., D.S.)	Hartford, Conn.
Brewer, Mary Sanford (S., H., Ed., E.)	(Mhtn) New York City
Brooks, Mary Elizabeth (Ed.)	(Bklyn) New York City
Burt, Amy Gertrude (S., D.S., and D.A.)	Plainfield, N. J.
Butterworth, Emily Du Bois (F.A.)	(Mhtn) New York City
Canter, Sara (D.A.)	(Mhtn) New York City
Chapin, Nellie Pitts (P.T.)	Mount Carmel, Ill.
Cleary, Mary G. (H.)	(Mhtn) New York City
Comings, Josephine Hamilton (F.A. and M.T.)	Hiram, Ohio
Crane, Ella E. (H.)	Canandaigua, N. Y.
Crawford, Eunice (Ed.)	(Mhtn) New York City
Crooker, Frederick Foster (Ed.)	(Mhtn) New York City
Crosby, Martha (E., F.A.)	Brewster, N. Y.
Dalton, Elizabeth (E.)	Jersey City, N. J.
Dean, Philip Redfield (F.A.)	Colebrook, Conn.
Dickerson, Edna (Ed.)	(Bklyn) New York City
Doherty, Elizabeth Frances (Ed.)	(Mhtn) New York City
Du Bois, Mildred (F.A.)	(Mhtn) New York City
Du Bois, Solomon E. (Ed.)	(Mhtn) New York City
Elsass, Cornelia (Ed.)	(Mhtn) New York City
Erwin, Kate Augusta (Ed.)	(Mhtn) New York City
Farley, Mary L. (H.)	(Br) New York City
Farnum, Mary Louise (Ed., K.)	Port Jervis, N. Y.
Fette, Elizabeth Wilhelmina (Ed.)	Salzufen, Germany
Gall, Marion Dewar (Ed.)	Paterson, N. J.
Green, Jeannie (Ed., H.)	Woodside, N. Y.
Greene, Ethel (E., H., F.A.)	(Mhtn) New York City
Grey, Eva Woodword (Ed.)	(Bklyn) New York City
Griffin, Minnie T. (Ed.)	White Plains, N. Y.
Griswold, Florence Kressler (E., H., S.)	(Mhtn) New York City
Halligan, Thomas Cooper (Ed.)	(Mhtn) New York City
Hamburg, Edwin C. (Ed.)	(Mhtn) New York City
Hix, Melvin (Ed.)	(Mhtn) New York City
Huggan, Agnes Edith (Ed.)	Newark, N. J.
Hughes, Katharine Helen (Ed., H.)	(Mhtn) New York City
Hughson, William Burke (M.T.)	San Francisco, Cal.
Hull, Marion Delafield (D.A. and D.S.)	(Mhtn) New York City
Hulse, Emma Antoinette (Ed.)	(Mhtn) New York City
Jenkins, Alice Dunbar (E., Ed., F.A., D.A.)	Natchez, Miss.
Kelly, William Henry (Ed.)	(Mhtn) New York City

Lilly, Mary M. (Ed.)	.....	.....	(Mhtn) New York City
Lockwood, Mary Ensign (E., Ed.)	.....	.....	Rochester, N. Y.
Maddock, Catherine Loretto (Ed.)	.....	.....	(Q) New York City
Mathews, Mary Estelle (E.)	.....	.....	(Mhtn) New York City
Martin, Frances Elizabeth (Ed.)	.....	.....	(Mhtn) New York City
Mast, Josephine (F.)	.....	.....	(Bklyn) New York City
MacKinstry, Annie (F.A.)	.....	.....	(Mhtn) New York City
McCabe, Emma A. (H.)	.....	.....	(Mhtn) New York City
McDonald, Mrs. Mary Isabel (Ed.)	.....	.....	(Mhtn) New York City
McGrury, Emma Louisa (E.)	.....	.....	(Mhtn) New York City
McKernan, Christine Eliza (Ed.)	.....	.....	Jersey City, N. J.
McMahon, Mary Elizabeth (Ed.)	.....	.....	(Mhtn) New York City
Merrell, Charlotte C. (E.)	.....	.....	Denver, Col.
Middleton, Florence (E.)	.....	.....	(Mhtn) New York City
Moore, Elizabeth Putnam (B.)	.....	.....	(Mhtn) New York City
Nichols, Esther Connor (F.A.)	.....	.....	(Mhtn) New York City
O'Connell, Margaret F. (E.)	.....	.....	(Mhtn) New York City
Orcutt, Hortense May (Ed.)	.....	.....	Northampton, Mass.
Orthmann, Elizabeth (Ed.)	.....	.....	(Mhtn) New York City
Owen, Elizabeth H. P. (Ed., E., H.)	.....	.....	Balpalta, India
Palen, Louis Ellsworth (Ed.)	.....	.....	(Mhtn) New York City
Platt, Alethea Hill (F.A.)	.....	.....	(Mhtn) New York City
Preece, Emma L. (E.)	.....	.....	(Mhtn) New York City
Quimby, Ernest Scott (Ed.)	.....	.....	(Mhtn) New York City
Rabenort, William Louis (Ed.)	.....	.....	Paterson, N. J.
Ransome, Josephine Marie (F.A.)	.....	.....	Northumberland, N. Y.
Remy, Renata (E.)	.....	.....	(Mhtn) New York City
Rostetter, Alice Louise (E.)	.....	.....	(Mhtn) New York City
Roys, Sarah H. (Ed., D.A.)	.....	.....	(Mhtn) New York City
Ruben, Juliet Barrett (Ph., E., H.)	.....	.....	(Mhtn) New York City
Salberg, Emma Jane (Ed.)	.....	.....	(Mhtn) New York City
Scott, Caroline Wheeler (D.A., D.S.)	.....	.....	West Haverstraw, N. Y.
Seabury, Bertha (B., E., H., F.A.)	.....	.....	Pittsburg, Kansas
Sigerson, Elizabeth G.	.....	.....	(Mhtn) New York City
Smith, Maria Louise (Ed.)	.....	.....	(Mhtn) New York City
Stewart, Clara (Ed., D.A.)	.....	.....	Providence, R. I.
Stix, Florence Deitsch	.....	.....	(Mhtn) New York City
Sundberg, Anna Amida	.....	.....	Newark, N. J.
Taber, Julia Doak (Ed., D.S.)	.....	.....	Poughkeepsie, N. Y.
Taylor, Anna M. (Ed.)	.....	.....	(Mhtn) New York City
Upshaw, May Bradford (Ed.)	.....	.....	(Mhtn) New York City
Weeks, Lorre (F.A.)	.....	.....	Grinnell, Ia.
Wells, Florence Rutherford (Ed.)	.....	.....	(Bklyn) New York City
White, Minnie (E.)	.....	.....	(Mhtn) New York City
Wood, Charlotte (D.S.)	.....	.....	Englewood, N. J.
Wright, Jane (Ed.)	.....	.....	South Orange, N. J.

## SUMMARY

Candidates for Higher Diploma.....	86
"    " Secondary Diploma.....	70
"    " Elementary Diploma.....	94
"    " Kindergarten Diploma.....	18
"    " Domestic Art Diploma.....	7
"    " Domestic Science Diploma.....	30
"    " Fine Arts Diploma.....	23
"    " Manual Training Diploma.....	25
Students in Collegiate Course.....	57
	— 410
Students not Candidates for a Diploma :	
Special Students.....	35
Special Students in Hospital Economics.....	7
Auditors and Irregular Students.....	61
Students from other Faculties in the University :	
From the Faculty of Philosophy.....	41
" the Faculty of Political Science.....	1
" the Faculty of Pure Science.....	3
" Columbia College.....	12
" Barnard College.....	10
	— 170
	— 580

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### PUPILS IN SCHOOLS:

#### Horace Mann School :

High School.....	243
Elementary School.....	185
Primary School.....	164
Kindergarten.....	47
	— 639

#### Experimental School :

Primary School.....	23
Kindergarten.....	40
	— 63

Extension Students.....	679
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## SCHEME OF ATTENDANCE, 1901-1902

MONDAY, WEDNESDAY AND FRIDAY

9-30	10-30	11-30	12-30	1-30	2-30	3-30
Education 1 (A) [F.] Education 5 [W.] Biology 1 [F.] Biology 3 (A) [W.] Biology 4 (B) [W.] Education 12 [W.] Domestic Art 1 [F.] Domestic Art 5 [M.] Domestic Art 5 [W.] Domestic Art 1 [F.] Domestic Art 1 [W.] Domestic Art 4 [W.] Domestic Science 2 [F.] Domestic Science 8 [W.] Domestic Science 8 [M.] Domestic Science 4 [W.] Domestic Science 4 [M.] Domestic Science 8 [W.] Domestic Science 8 [M.] Fine Arts 3 [W.] Fine Arts 3 [M.] Fine Arts 5 [W.] Fine Arts 5 [M.] Fine Arts 7 [W.] Fine Arts 7 [M.] Fine Arts 9 [W.] Fine Arts 9 [M.] Fine Arts 11 [W.] Fine Arts 11 [M.] Fine Arts 12 [W.] Fine Arts 12 [M.] Fine Arts 11 [W.] Fine Arts 11 [M.] Fine Arts 12 [W.] Fine Arts 12 [M.] Geography 6 [W.] Geography 6 [M.] Geography 4 (A) [W.] Geography 4 (A) [M.] Geography 6 [W.] Geography 6 [M.] Manual Training 2 [W.] Manual Training 2 [M.] Manual Training 3 [W.] Manual Training 3 [M.] Manual Training 4 [W.] Manual Training 4 [M.] Manual Training 5 [W.] Manual Training 5 [M.] Manual Training 6 [W.] Manual Training 6 [M.] Manual Training 7 [W.] Manual Training 7 [M.] Music 4 [W.] Music 4 [M.] Physical Science 1 [W.] Physical Science 1 [M.] Psychology A (A) [W.] Psychology A (A) [M.]	Education 3 (B) [W.] Education 4 [W.] Education 4 (W.) Education 4 [W.] Education 12 [M.] Education 12 [W.] Education 16 [W.] Education 16 [M.] Education 22 [W.] Education 22 [M.] Education 22 [W.] Education 22 [M.] Education 38 [W.] Education 38 [M.] Education 38 [W.] Education 38 [M.] Domestic Science 8 [W.] Domestic Science 8 [M.] Domestic Science 4 [W.] Domestic Science 4 [M.] Domestic Science 8 [W.] Domestic Science 8 [M.] Fine Arts 3 [W.] Fine Arts 3 [M.] Fine Arts 5 [W.] Fine Arts 5 [M.] Fine Arts 7 [W.] Fine Arts 7 [M.] Fine Arts 9 [W.] Fine Arts 9 [M.] Fine Arts 11 [W.] Fine Arts 11 [M.] Fine Arts 12 [W.] Fine Arts 12 [M.] Fine Arts 11 [W.] Fine Arts 11 [M.] Fine Arts 12 [W.] Fine Arts 12 [M.] Fine Arts 11 [W.] Fine Arts 11 [M.] Fine Arts 12 [W.] Fine Arts 12 [M.] Geography 6 [W.] Geography 6 [M.] Manual Training 2 [W.] Manual Training 2 [M.] Manual Training 3 [W.] Manual Training 3 [M.] Manual Training 4 [W.] Manual Training 4 [M.] Manual Training 5 [W.] Manual Training 5 [M.] Manual Training 6 [W.] Manual Training 6 [M.] Manual Training 7 [W.] Manual Training 7 [M.] Music 4 [W.] Music 4 [M.] Physical Science 1 [W.] Physical Science 1 [M.] Psychology A (A) [W.] Psychology A (A) [M.]	Education 14 (1/2) [W.] Education 14 (1/2) [M.] Education 18 [F.] Education 18 [W.] Education 20 [W.] Education 20 [M.] Education 25 [F.] Education 25 [W.] Education 29 [F.] Education 29 [W.] Education 37 (1/2) [W.] Education 37 (1/2) [M.] Education 44 [F.] Education 44 [W.] Biology 2 [W.] Biology 2 [M.] Education 36 [W.] Education 36 [M.] Education 40 [W.] Education 40 [M.] Education 44 [F.] Education 44 [W.] Biology 2 [F.] Biology 2 [W.] Domestic Science 1 [W.] Domestic Science 1 [M.] Fine Arts 2 [W.] Fine Arts 2 [M.] Fine Arts 2 [W.] Fine Arts 2 [M.] Fine Arts 9 [W.] Fine Arts 9 [M.] Fine Arts 10 [W.] Fine Arts 10 [M.] Fine Arts 16 [W.] Fine Arts 16 [M.] French A [W.] French A [M.] Geography 2 (1/2) [W.] Geography 2 (1/2) [M.] Kindergarten 1 [W.] Kindergarten 1 [M.] Manual Training 1 [W.] Manual Training 1 [M.] Music 2c [W.] Music 2c [M.] Physical Science 2 [W.] Physical Science 2 [M.] Psychology 11 [W.] Psychology 11 [M.] Geography 3 (2/2) [W.] Geography 3 (2/2) [M.] Geography 4 (2/2) [W.] Geography 4 (2/2) [M.] Geography 5 [W.] Geography 5 [M.] Kindergarten 2 [W.] Kindergarten 2 [M.] Manual Training 1 [W.] Manual Training 1 [M.] Manual Training 2 [W.] Manual Training 2 [M.] Music 3 [W.] Music 3 [M.] Physical Science 2 [W.] Physical Science 2 [M.] Psychology A (A) [W.] Psychology A (A) [M.]	Education 24 (2/2) [W.] Education 24 (2/2) [M.] Education 25 [W.] Education 25 [M.] Public Lectures [W.] Public Lectures [M.] Education 1 (A) [W.] Education 1 (A) [M.] Education 11 [W.] Education 11 [M.] Education 34 [W.] Education 34 [M.] Education 37 (1/2) [W.] Education 37 (1/2) [M.] Education 39 [W.] Education 39 [M.] Education 41 [W.] Education 41 [M.] Domestic Science 1 [W.] Domestic Science 1 [M.] Domestic Science 1 [W.] Domestic Science 1 [M.] German A [W.] German A [M.] Manual Training 9 [W.] Manual Training 9 [M.] Music 1 [W.] Music 1 [M.] Music 3c [W.] Music 3c [M.] Music 7c [W.] Music 7c [M.] Psychology A (C) (1/2) [W.] Psychology A (C) (1/2) [M.] Fine Arts 16 [W.] Fine Arts 16 [M.] Fine Arts 16 [W.] Fine Arts 16 [M.] French A [W.] French A [M.] Geography 4 (2/2) [W.] Geography 4 (2/2) [M.] Kindergarten 1 [W.] Kindergarten 1 [M.] Manual Training 1 [W.] Manual Training 1 [M.] Music 2c [W.] Music 2c [M.] Physical Science 2 [W.] Physical Science 2 [M.] Psychology 11 [W.] Psychology 11 [M.] Geography 3 (2/2) [W.] Geography 3 (2/2) [M.] Geography 4 (2/2) [W.] Geography 4 (2/2) [M.] Geography 5 [W.] Geography 5 [M.] Kindergarten 2 [W.] Kindergarten 2 [M.] Manual Training 1 [W.] Manual Training 1 [M.] Manual Training 2 [W.] Manual Training 2 [M.] Music 3 [W.] Music 3 [M.] Physical Science 2 [W.] Physical Science 2 [M.] Psychology A (A) [W.] Psychology A (A) [M.]	Music 1 [W.] Music 1 [M.] Music 2 [W.] Music 2 [M.] Education 2 [W.] Education 2 [M.] Education 3 [W.] Education 3 [M.] Education 4 [W.] Education 4 [M.] Education 5 [W.] Education 5 [M.] Education 6 [W.] Education 6 [M.] Education 7 [W.] Education 7 [M.] Education 8 [W.] Education 8 [M.] Education 9 [W.] Education 9 [M.] Education 10 [W.] Education 10 [M.] Education 11 [W.] Education 11 [M.] Education 12 [W.] Education 12 [M.] Education 13 [W.] Education 13 [M.] Education 14 [W.] Education 14 [M.] Education 15 [W.] Education 15 [M.] Education 16 [W.] Education 16 [M.] Education 17 [W.] Education 17 [M.] Education 18 [W.] Education 18 [M.] Education 19 [W.] Education 19 [M.] Education 20 [W.] Education 20 [M.] Education 21 [W.] Education 21 [M.] Education 22 [W.] Education 22 [M.] Education 23 [W.] Education 23 [M.] Education 24 [W.] Education 24 [M.] Education 25 [W.] Education 25 [M.] Public Lectures [W.] Public Lectures [M.]	Music 1 [W.] Music 1 [M.] Music 2 [W.] Music 2 [M.] Education 2 [W.] Education 2 [M.] Education 3 [W.] Education 3 [M.] Education 4 [W.] Education 4 [M.] Education 5 [W.] Education 5 [M.] Education 6 [W.] Education 6 [M.] Education 7 [W.] Education 7 [M.] Education 8 [W.] Education 8 [M.] Education 9 [W.] Education 9 [M.] Education 10 [W.] Education 10 [M.] Education 11 [W.] Education 11 [M.] Education 12 [W.] Education 12 [M.] Education 13 [W.] Education 13 [M.] Education 14 [W.] Education 14 [M.] Education 15 [W.] Education 15 [M.] Education 16 [W.] Education 16 [M.] Education 17 [W.] Education 17 [M.] Education 18 [W.] Education 18 [M.] Education 19 [W.] Education 19 [M.] Education 20 [W.] Education 20 [M.] Education 21 [W.] Education 21 [M.] Education 22 [W.] Education 22 [M.] Education 23 [W.] Education 23 [M.] Education 24 [W.] Education 24 [M.] Education 25 [W.] Education 25 [M.] Public Lectures [W.] Public Lectures [M.]	

# SCHEME OF ATTENDANCE

## TUESDAY, THURSDAY AND SATURDAY

9.30	10.30	11.30	12.30	1.30	2.30	3.30	4.30
Education 1 (C) [S.]	Education 4 [S.]	Education 1 (B) [S.]		Education 17	Education 1		
Education 10 [T. and Th.]	Education 9 [T. and Th.]	Education 28 [T. and Th.]		[T. and Th.]	[T. and Th.]		
Education 30 [S.]	Biology 1 [T.]	Domestic Art 8 [T.]		Education 23 [T. and Th.]	Biology 5 [T. and Th.]		
Domestic Art 8 [T.]	Biology 2 [T.]	Domestic Art 25 [T. and Th.]		Education 32 [T. and Th.]	Education 8 [T. and Th.]		
[T. and Th.]	Domestic Art 3 [T.]	Domestic Science 3 [T.]		Education 33 [T.]	Education 9 [T. and Th.]		
Domestic Science 3 [T.]	Domestic Science 4 [T.]	Domestic Art 4 [T.]		Education 42 [T. and Th.]	History 7 [T. and Th.]		
[T. and Th.]	Domestic Art 2 [T.]	Domestic Art 1 [T.]		Domestic Art 3 [T.]	Education 10 [T. and Th.]		
Domestic Art 1 [T.]	Domestic Science 7 [T.]	Domestic Science 1 [T.]		Domestic Art 3 [T.]	Education 43 [T. and Th.]		
Domestic Science 7 [T.]	Domestic Science 3 [T.]	Domestic Art 7 [T.]		Biology 2 [T.]	Education 44 [T. and Th.]		
[T. and Th.]	Domestic Art 3 [T.]	Domestic Art 7 [T.]		Domestic Art 3 [T.]	Education 45 [T. and Th.]		
Fine Arts 1 (A) [T.]	Fine Arts 1 (A) [T.]	English 2 [T. and Th.]		Biology 2 [T.]	Education 46 [T. and Th.]		
[T. and Th.]	Fine Arts 3 [T.]	English 2 [T. and Th.]		Domestic Art 3 [T.]	Education 47 [T. and Th.]		
Fine Arts 4 [T.]	Fine Arts 4 [T.]	English 4 (1/2) [T. and Th.]		Domestic Art 3 [T.]	Education 48 [T. and Th.]		
[T. and Th.]	Fine Arts 5 [T.]	English 4 (1/2) [T. and Th.]		Biology 2 [T.]	Education 49 [T. and Th.]		
Fine Arts 5 [T.]	Fine Arts 5 [T.]	English 4 (1/2) [T. and Th.]		Domestic Art 3 [T.]	Education 50 [T. and Th.]		
[T. and Th.]	Fine Arts 6 [T.]	English 6 (1/2) [T. and Th.]		Biology 2 [T.]	Education 51 [T. and Th.]		
Fine Arts 6 [T.]	Fine Arts 6 [T.]	English 6 (1/2) [T. and Th.]		Domestic Art 3 [T.]	Education 52 [T. and Th.]		
[T. and Th.]	Fine Arts 7 [T.]	English 7 (1/2) [T. and Th.]		Biology 2 [T.]	Education 53 [T. and Th.]		
Fine Arts 7 [T.]	Fine Arts 7 [T.]	English 7 (1/2) [T. and Th.]		Domestic Art 3 [T.]	Education 54 [T. and Th.]		
[T. and Th.]	Fine Arts 8 (A) [T.]	English 8 (1/2) [T. and Th.]		Biology 2 [T.]	Education 55 [T. and Th.]		
Fine Arts 8 (B) [S.]	Fine Arts 8 (B) [S.]	English 8 (1/2) [T. and Th.]		Domestic Art 3 [T.]	Education 56 [T. and Th.]		
[T. and Th.]	Fine Arts 9 (B) [S.]	English 9 (1/2) [T. and Th.]		Biology 2 [T.]	Education 57 [T. and Th.]		
Fine Arts 9 (B) [S.]	Fine Arts 9 (B) [S.]	English 9 (1/2) [T. and Th.]		Domestic Art 3 [T.]	Education 58 [T. and Th.]		
[T. and Th.]	History 1 (A) [S.]	History 1 (A) [T.]		Biology 2 [T.]	Education 59 [T. and Th.]		
History 1 (A) [S.]	History 1 (A) [S.]	History 1 (A) [T.]		Domestic Art 3 [T.]	Education 60 [T. and Th.]		
[T. and Th.]	History 1 (B) [S.]	History 1 (B) [T.]		Biology 2 [T.]	Education 61 [T. and Th.]		
History 1 (B) [S.]	History 1 (B) [S.]	History 1 (B) [T.]		Domestic Art 3 [T.]	Education 62 [T. and Th.]		
[T. and Th.]	Kindergarten 3 [T.]	Kindergarten 3 [T.]		Biology 2 [T.]	Education 63 [T. and Th.]		
Kindergarten 3 [T.]	Kindergarten 3 [T.]	Kindergarten 3 [T.]		Domestic Art 3 [T.]	Education 64 [T. and Th.]		
[T. and Th.]	Manual Training 1 [T.]	Manual Training 1 [T.]		Biology 2 [T.]	Education 65 [T. and Th.]		
Manual Training 1 [T.]	Manual Training 1 [T.]	Manual Training 1 [T.]		Domestic Art 3 [T.]	Education 66 [T. and Th.]		
[T. and Th.]	Manual Training 2 [T.]	Manual Training 2 [T.]		Biology 2 [T.]	Education 67 [T. and Th.]		
Manual Training 2 [T.]	Manual Training 2 [T.]	Manual Training 2 [T.]		Domestic Art 3 [T.]	Education 68 [T. and Th.]		
[T. and Th.]	Manual Training 3 [T.]	Manual Training 3 [T.]		Biology 2 [T.]	Education 69 [T. and Th.]		
Manual Training 3 [T.]	Manual Training 3 [T.]	Manual Training 3 [T.]		Domestic Art 3 [T.]	Education 70 [T. and Th.]		
[T. and Th.]	Manual Training 4 [T.]	Manual Training 4 [T.]		Biology 2 [T.]	Education 71 [T. and Th.]		
Manual Training 4 [T.]	Manual Training 4 [T.]	Manual Training 4 [T.]		Domestic Art 3 [T.]	Education 72 [T. and Th.]		
[T. and Th.]	Manual Training 5 [T.]	Manual Training 5 [T.]		Biology 2 [T.]	Education 73 [T. and Th.]		
Manual Training 5 [T.]	Manual Training 5 [T.]	Manual Training 5 [T.]		Domestic Art 3 [T.]	Education 74 [T. and Th.]		
[T. and Th.]	Music 1c [S.]	Music 1c [S.]		Biology 2 [T.]	Education 75 [T. and Th.]		
Music 1c [S.]	Music 1c [S.]	Music 1c [S.]		Domestic Art 3 [T.]	Education 76 [T. and Th.]		
[T. and Th.]	Physical Science 1 [T.]	Physical Science 1 [T.]		Biology 2 [T.]	Education 77 [T. and Th.]		
Physical Science 1 [T.]	Physical Science 1 [T.]	Physical Science 1 [T.]		Domestic Art 3 [T.]	Education 78 [T. and Th.]		
[T. and Th.]	Physical Science 1 [T.]	Physical Science 1 [T.]		Biology 2 [T.]	Education 79 [T. and Th.]		
Physical Science 1 [T.]	Physical Science 1 [T.]	Physical Science 1 [T.]		Domestic Art 3 [T.]	Education 80 [T. and Th.]		
[T. and Th.]	Physical Science 5 [S.]	Physical Science 5 [S.]		Biology 2 [T.]	Education 81 [T. and Th.]		
Physical Science 5 [S.]	Physical Science 5 [S.]	Physical Science 5 [S.]		Domestic Art 3 [T.]	Education 82 [T. and Th.]		

N. B.—In the above program (1/2)=first half-year; (2/2)=second half-year.

Capitals in parenthesis (A), (B), etc., indicate divisions of classes.

Courses given in Columbia College are marked "c,"







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